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**CALIFORNIA
HISTORICAL
RADIO SOCIETY**

Norman
Rockwell

ARMCHAIR GENERAL

APRIL 29, 1944

ABOUT CHRS

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CHRS officers for 1996 are:
Steve Kushman, President
Russ Turner, Secretary
Will Jensby, Treasurer.

These volunteer committee chairmen make CHRS work – please help them; give one a call today to volunteer:

Paul Bourbin - Swap meets
Mike Simpson - Membership
Norm Lehfelddt - Badges
Mike Adams - Publicity
Dale Sanford - Mailing
Steve Kushman - Mail & hotline
Russ Turner - Mail pick up
Hall Layer - Membership Records
Norm Braithwaite - North Valley

The Board of Directors is chaired by **Bart Lee**, and includes, in addition to the officers: **Mike Adams**, **John Wentzel** and **John Eckland**.

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Hotline: (415)-978-9100....

On the World Wide Web:

<http://www.lookup.com/homepages/77848/home.html>

The California Historical Radio Society is a non-profit corporation chartered in the State of California in 1975. CHRS was formed to promote the restoration and preservation of early radio and broadcasting. Our goal is to provide the opportunity to exchange ideas and information on the history of radio, particularly in the West, with emphasis in collecting, literature, programs, and the restoration and display of early equipment.

The *Journal* of the Society is published periodically in printed and occasionally in audio-tape format, and is furnished free to members. Yearly membership dues are \$15 (U.S. funds please). Submissions for the *Journal* are invited and welcomed. Typewritten copy is preferred, best submitted on 3.5" IBM or Mac diskettes in ASCII or a standard word processing format (e.g., Word Perfect). Send all material, with illustrations and a photo of the author to Editor Bart Lee, including your name, address and phone number. You write about radio and we'll print it. The *Journal* is copyright CHRS, all rights reserved. No part of this publication may be reproduced in any form, or by any means, without prior written permission, which will be freely given. You may always make "fair use" of quotations of text fully attributed by you to source (this *Journal*) and author.

Main swapmeets are in February, May, August and November (at Foothill College now), with a meet in Benicia in March, San Francisco in July, and San Luis Obispo in June. Contact the President if you want to sponsor a swapmeet. Local swapmeets bring out new old radios!

PRESIDENT'S MESSAGE 1996

by Steve Kushman

Greetings for 1996! I'm honored that your board of directors selected me to be your President. They must have thought I could do the job...or, they thought, "Who can we stick with this?"

This is a new experience for me and I'm very thankful for all the help I've been getting. Especially from Dale Sanford. Dale, our outgoing president, has done an outstanding job of running the club during his term. He has been there when I needed him and he got me off to a good start. Dale, by his choice, remains as our mailing chairman, and by my choice, on the Board of Directors! Thanks also to Paul Bourbin, whom I call often to pick his brain and who continues to do a superb job as our on-site swap meet chairman. Thanks to Will Jensby, our treasurer, who takes your checks to the bank and keeps the books balanced. Thanks to Hal Layer, our membership secretary, who takes the mounds of paperwork I send him and inputs the information into the membership computer. Thanks go to Mike Adams, our publicity chairman, who makes sure we have our information in publications such as A.R.C. Our secretary Russ Turner who

gives great minutes. Did you know that John Eckland brings the do-nuts and coffee to the meets? Thanks, John!

And, finally, to Bart Lee, who makes this journal a reality! (He could use some help with desktop publishing!) Let's not forget our two new chairmen, Mike Simpson, our membership chairman and Norm Lehfeldt, our badge chairman. Thanks for accepting these positions!

1995 was a good year for CHRS. Our membership grew to almost four hundred and continues to grow almost daily. We had great swap meets and I hope we all acquired some good radios to preserve and also made some new friends. The last swap meet on February 3rd at Ampex was a great success, despite the rain. We had about 45 happy sellers. And quite a few happy buyers, as evidenced by smiling faces and armfuls of radios.

I'm sorry to report that the meet on February 3rd was our last at the Ampex Bay Road Site. The on-again-off-again sale of the Ampex property that includes the Bay Road lots and cafeteria has been completed. We will certainly miss this location as it served us well. We would like to thank the Ampex Corporation for its support and the use of its facilities. Our thanks go to Ekhart Willms, our contact at

Ampex, for making the arrangement these past years. Ekhart says there may be a possibility of getting back to Ampex, next year, at their new downsized location. He says the lot at the Broadway location should be big enough for our events. Thanks again, Ekhart!

For the remainder of this year, we'll be moving south to a very familiar location.... Lot T on the Foothill College Campus in Los Altos Hills will be the site for the May 4th, August 3rd, and November 2nd events. Don't bother to bring flashlights because the 8 a.m. starting time will be enforced. DO NOT purchase the \$1.00 parking permit from the vending machines. Parking fees are included in the fee the club pays Foothill. Buyers will drive straight ahead and park in Lot T. Sellers will turn right directly inside the lot and line up on the perimeter. At 8 a.m., Paul Bourbin cuts the ribbon and the sellers drive into the lot and set-up. Don't forget to bring a \$5.00 bill for the seller's fee. Ampex graciously donated our space to us, but at Foothill, we must pay. See the map for instructions to Foothill College. Also, remember to update the calendars we mailed you and call the HOTLINE for the best updated information. The next regional

meet will be at the Home Video store in Benecia, Saturday, March 30th at 8AM. See the map for the route to Home Video. Thanks to Rich Compestine and Jim McDowell for hosting this event. Be sure to call the HOTLINE for rainout information. Seller's fee applies.

And speaking of information, CHRS is now on the World Wide Web!!! CHRS member, Alan Voorhees, a graphic designer, has built and installed a CHRS web site. To get there, type:

<http://www.lookup.com/homepages/77848/home.html>

You'll find information about CHRS meets, articles from our *Journal*, audio clips from old radio shows & more. There are links to other Web sites that relate to radio collecting, such as A.R.C.'s Web page. If you have ideas for our site, call the HOTLINE or e-mail Alan Voorhees. If you wish to receive e-mail through this site, send your e-mail address to Alan and he will post your name and address. Our thanks go to Alan for getting CHRS on the information super-highway and maintaining the site!

Now, a little about myself. I'm a native San Franciscan and have been interested in radio most of my life. When I was a kid, I would walk around the

house clipping my crystal set to every piece of metal I could find. The finger stop on the dial phone worked quite well! I aquired two antique sets during college, (A Norco cathedral and an A.K. Model 20), and have been actively collecting for the past seven years.

During the time I've been a member of the club, I've noticed that the club's main purpose seems to be a vehicle for the exchange of radios and parts. The club should be more. It should be a vehicle for the exchange of ideas, the sharing of our skills, knowledge, and experiences, and the building of friendships. Now it's time for us to give something back to the club. Who would be interested in hosting a club meeting?.... or an open house?.... or a swap meet?.... or demonstrating a skill or technique in the shop?.... or speaking at a meeting?.... or writing an article for the *Journal*? (Bart could use some help with desktop publishing!).... If you want to help the club in any of these areas, call me or call the HOTLINE.... How about a picnic? We'll be having one at the Western Railroad Museum, on state route 12, between Fairfield and Rio Vista. It's an opportunity for our families to get together, to examine and ride on some fine old electric rolling stock, and by

the way, there will be a swap meet before the picnic. Bring your battery sets and portable phonos to play during lunch. Update your calendars by changing September 7th, Benecia, to September 14th, W.R. Museum, Swap Meet and Picnic. Since there is a \$5.00 admission fee to the museum, the CHRS sellers fee will be waived. See you at 8AM!

The CHRS library needs a home! This fine collectoin of technical manuals, schematics, books and other materials relating to radio is in storage, in Bart's basement. It's soon to be in storage in my garage. Does anyone have a spare room in their business,, or *anyplace* ,where we could set up the library and have it accessible to the members? The valuable information in this library should be available to us all. Who can help?

The printing of this journal is a costly proposition. The large format and beautiful color cover, make our juurnal really stand out among other publications of its kind. This is great, but expensive,when we need 400 copies! Does any member work for, or own a printing company that is willing to donate services or provide cut-rate services to our non-profit organization? Of course you will have a nice ad in a

prominent place in each edition. And remember our journal goes all over the world. Who can help?

Have I mentioned that Bart needs help with desktop publishing? He needs a journal co-editor to help with input and layout. Who can help?

Do you have one or two radios you would like to sell at one of our events, but don't want to set up a table? Let CHRS sell them or auction them for you. You set the price and the club will take 10% of the actual selling price. No more than two radios per person please. Bring them to the CHRS table or call the HOTLINE to make arrangements.

Finally, thanks to all of you who said you would help the club or serve on the Board of Directors on your renewal forms. You may be requested to serve as co-chairmen in the event the chairman is not available. And, if you know a member who has'nt renewed for 1996, tell them to send in their \$15, Now! And if you know someone who wants to join, have them call the HOTLINE.

I look forward to serving you as president and welcome any comments or suggestions you may have about the club. Please call me at home, (415)-821-7671, or call the HOTLINE and leave a message.

Happy Collecting,

Steve



CHRS HOTLINE
(415-978-9100)....
LET's USE IT!

CHRS ON THE
World Wide Web..

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THOUGHTS FROM CHAIRMAN BART

by Bart Lee, xWPE2DLT
327 Filbert Steps
San Francisco, CA 94133
(415) 788 4072

HANK OLSON WINS DOC HERROLD AWARD FOR 1995!

The Board of Directors of CHRS has awarded **Hank Olson, W6GXN** the 1995 **Charles D. 'Doc' Herrold Award** for his outstanding work as a radio historian. We have all enjoyed Hank's writings in the Journal, and they have also appeared on local subjects in the Antique Wireless Association publications and others. Congratulations to Hank Olson.

NOW IS THE TIME FOR ALL GOOD MEN TO COME TO THE AID OF THEIR OLD RADIO CLUB!

We need a new Vice President (i.e., President-in-Waiting). **Steve Kushman** has, as it were, ascended to the Presidency, the VEEP spot is open. The VEEP can be the next President as soon as Steve wants to move on. Volunteer now. Call me or Steve or the CHRS HotLine. Our Society works so well because the people in it work so hard. Help us make it work even better. Volunteer now to act as Vice President or for other tasks and programs.

INTERNET ALERT. We have a home page on the World Wide Web subset of the Internet. Turn on your modem; Go To our World Wide Web site, designed by **Alan Voorhees**, to find there in electronic form several years' worth of *Journal* articles, CHRS info and swapmeet details, and selections from the Golden Age of Radio:

<http://www.lookup.com/homepages/77848/home.html>

Computer communications seems to be replicating Radio History, and it is now about at the transition between industrial Spark technology and consumer vacuum Tube technology. This is an interesting time, by any measure. Our home page is reproduced nearby (it is in color on the Web). Steve Kushman has been working to put the Web Page together. So far the texts of the articles and notices of the last several CHRS Journals have been de-archived to become text files accessible at the Web Page. We will continue to put up articles as we publish them.

ACADEMIC CONTROVERSY! It is a measure of the maturity of our hobby (or perhaps its immaturity -- hi) that we have now an academic controversy. **John Bryant** and **Dr. Harold Cones** (Dr. DX) put out their wonderful *Zenith TransOceanic* book last year. (In the interests of full disclosure, I was one of five guest editors for them). **Alan Douglas**, who has earned his reputation (in spades) as a radio historian with many outstanding books and articles of his own (e.g., *Radio Manufacturers of the 1920s*) is a man to whom I am indebted for research assistance in old wireless matters. Alan has reviewed the *TransOceanic* book, and thereby hangs a tale.

History, even the history of technology, is stories about people. Sometimes people make great cities and nations, good or bad wars, art, even radios. Some of the people who have made radios have made industries and affected the lives of many millions of people, for example, Marconi and Sarnoff. Some such people have made big companies and advanced the art, for example, Commander McDonald of Zenith. Sometimes these people didn't get along with each

other, e.g. DeForest, Armstrong, Sarnoff, McDonald, and the list goes on... Sometimes the people who have chosen to tell the stories of these great men don't get along too well either. History is no more a brotherhood than industry.

Profits measure the success of an industry, but in some sense, truth alone is the measure of History. What Alan Douglas has to say about Zenith (and the TransOceanic book) may be, at least in part, true. What John Bryant has responded is, no doubt, very largely true. What we get from this is, I hope, soon to be a Hegelian synthesis: more, better truth. It is, however, too bad our said benefit comes at such a high cost in hurt feelings and recriminations. In the end, however, that may be the price for honest History, even about old radios.

There's a thousand ways to like an old radio, or a collection of them, or books about them, and the men associated with them and the radio arts. One of those ways is by means of unflinching attention to the flaws of character, as well as the virtues, of the men who created and advanced the radio arts. I for one, want to know what Sarnoff and McDonald thought about each other. That will be part of what I bring to my Zenith Chairside and my RCA AR 88. I hope the historians of radio (and among the really goods ones are Alan Douglas, John Bryant and Harold Cones), will not shrink from, or shirk, controversy, if that's what it takes to get to the truth, or even if truth be only a by-product. Our hobby will be a stronger brotherhood for that.

JOURNAL WRITING. We always want your articles and notes *and especially illustrations*. If you will write about old radio, we will (if need be edit it and...) publish it. Become thereby rich and famous! Earn the respect of men and the love of women!

Please also put your name on submissions so we can give you credit. We still don't know who wrote the nice S-38 piece in this issue.

ANARC. The Association of North American Radio Clubs has welcomed CHRS to its membership. The clubs are mostly short wave listening clubs with regional bases. They are particularly interested in manning a Committee for Vintage Radio, much as **Jerry Berg** and others operate the ANARC Committee to Preserve Radio Verifications (CPRV). One possibility would be contests using vintage gear or vintage circuits at specific times. For example, how many countries can you hear on a one tube regenerative shortwave receiver in 48 hours at the winter solstice? 100? How many states on a crystal set? 10? Other such challenges come to mind. The Antique Wireless Association has a vintage gear contest for amateur radio operators that is quite popular. When was the last time you fired up that old Hartley oscillator and the Superwasp? Anyone with some interest in such a Vintage Radio Committee should drop me a line or give me a call.

BOOKS and LIBRARY. On April 2, several of us have been invited to go to the San Francisco Public Library to go over their discards for books for the CHRS library. The SF Public Library throws away anything that is not current, so we may get some old books. Anyone who wants to come meet us at 3PM at the staff entrance on McAllister Street. A work party will meet at noon at my house (327 Filbert Steps -- call for directions 788 4072) to pack and move the part of the CHRS library that's in my basement. I will be parting with basement vintage electronics to members of the work party at very reasonable prices after the work party finishes (I have to clean up the basement for foundation work).

73
Burt

CHRS BOARD MEETING
December 27, 1995

The budget was approved and as of now there is enough money to cover expenses. But, the journals are very expensive, and various ways of reducing costs were discussed. It was agreed that *Journal* should be kept the way it is, for now, because the color cover is great, and the size makes it easily readable. Bart Lee reports the first journal of 1996 should be ready to go by Feb. or March. There will be three printed journals this year because the audio tapes have been put on hiatus, due to lack of interest. By the way the journals cost more than the tapes!

The swap meet situation at Ampex is up in the air, due to the Ampex property possibly being sold. There is a possibility we could go back to Foothill. It was decided we should commit to Foothill if we could. The return of the \$5 sellers fee was discussed. It would be needed if we went back to Foothill. Various locations for a home for a club office and library were discussed, including The Presidio or Fort Mason. Bart will look into this. In the meantime, the library still must be moved from Bart's basement. Steve offered to move it to his garage. We need to organize a work party.

The board elected vice president Steve Kushman, to be the new President. Then, the ~~RED BINDER~~, was symbolically handed across the table by outgoing President, Dale Sanford.

As not to burden the president, Dale,(who used to do all the work), suggested that some of the club functions might be handled by chairmen. These chairmanships were suggested:

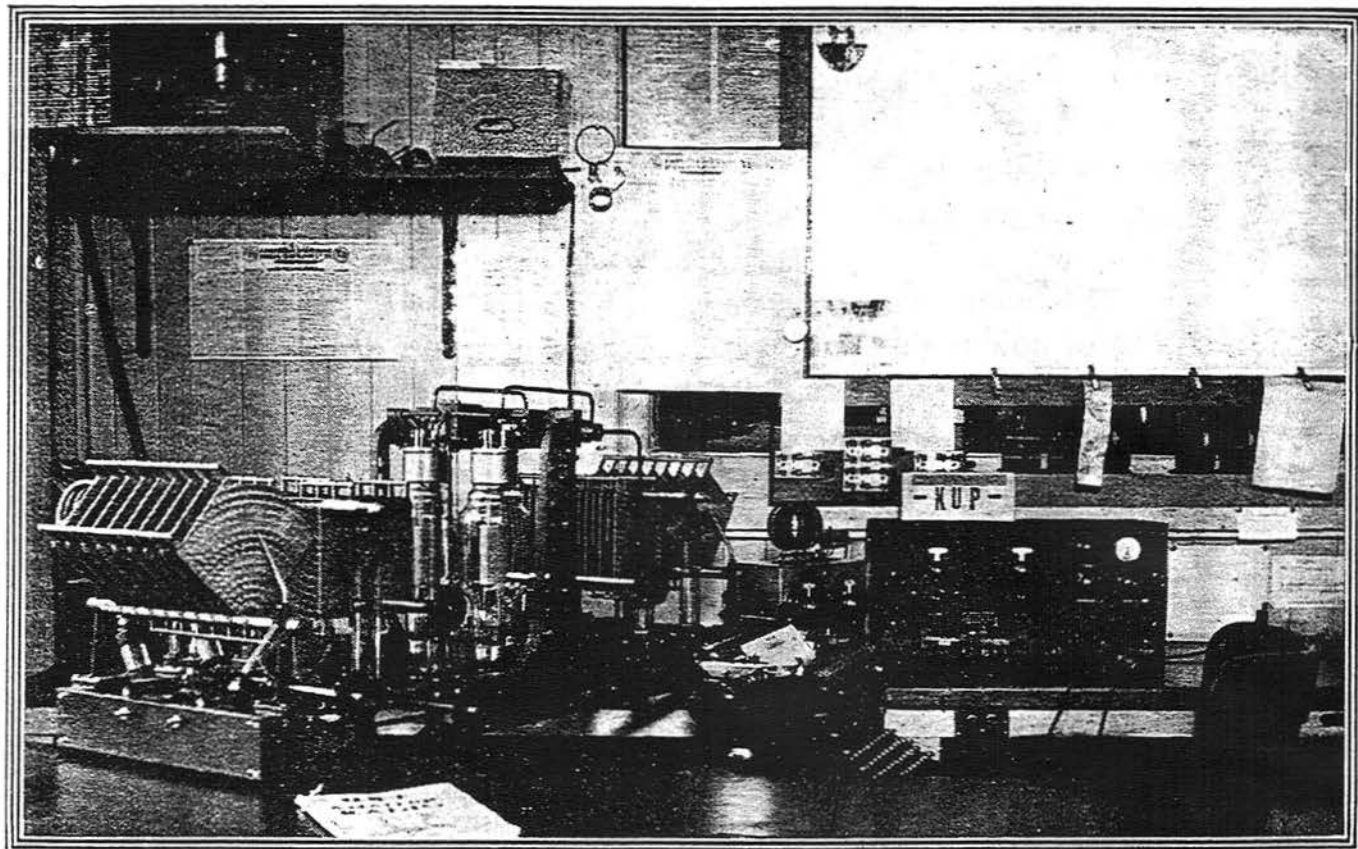
Paul Bourbin - Swap meets
Mike Simpson - Membership
Norm Lehfeldt - Badges
Mike Adams - Publicity
Dale Sanford - Mailing
Steve Kushman - Mail & hotline
Russ Turner - Mail pick up

Bart Lee still needs a co-editor to help with the journal. You should have typing skills and layout skills. He also suggests that the club have a page on the World Wide Web. The possibility of the club auctioning or selling items for members was discussed. No junk, nothing under \$25, the club gets %10 of sale price.

Meeting was adjourned, and all left with high hopes for a great 1996! *Approved by,*



Russ Turner
Secretary, CHRS



KUP, San Francisco

During the first half of 1930, KUP of the *San Francisco Examiner* handled 1,250,000 words of press, weather, stock quotations and financial survey, besides the daily quota of deadhead traffic handled as an accommodation to operators at sea. The last half of 1930 will probably exceed one and a half million words. At present KUP holds a record for transmission of more words in a six months period than any other station of its kind in the world.

KUP's half-kilowatt transmitter is of

the tuned plate, tuned grid, self-excited type. Two DeForest Audions, 504A type, are employed in parallel.

"I sincerely hope we shall be able to co-operate with you in developing widespread interest in DeForest Audions, and that within the next six months we may prove that the DeForest 504A will outlast any other tube sold. I feel most confident in them," states R. G. Martin, Manager of KUP.

And why not? After all, there is no substitute for twenty-five years' experience.

WRITE for catalog on DeForest transmitting tubes for every conceivable purpose. Also do not hesitate to place special transmitting and receiving problems before our Engineering Department.



DE FOREST RADIO
COMPANY
PASSAIC, NEW JERSEY

Export Department:
304 E. 45th Street,
New York City, N. Y., U. S. A.

SAN FRANCISCO'S RADIO STATION K U P and The Mobile Press Stations

by Hank Olson, W6GXN

In the late twenties, as Dollar and other ship lines began to convert from low frequency spark to high frequency vacuum tube equipment, the increased efficiency of high frequency had the effect of opening up new possibilities for information transmission. The original "Radio Law," stimulated by the Titanic disaster, mandated radio solely for the safety of ships at sea. But as HF, with its relatively narrow band signals, and ability to communicate with low power over vast distances, came into more general use on ships, other, less urgent, messages began to appear on these "short waves". Not only did personal messages from passengers on board ocean liners become practical with the new HF mode, but it now was quite feasible to disseminate news, too. This probably began simply with a ship's operator asking a shore station operator for the latest on some critical boxing match or baseball score and, finally, became a routine part of the material sent out by coastal HF stations, during their regular operations.

In 1927, two major newspapers, one on the Atlantic coast and one on the Pacific coast, the *New York*

Times and the *San Francisco Examiner*, requested that they be granted licenses and HF assignments, so that they could send out press releases to ships at sea in an exclusively news oriented manner. After all, the copy from these land based newspapers often went directly into liners' daily on board newspapers for the consumption of passengers.

Mr. Mienholtz of the *New York Times* and Fred Roebuck (FD) of the *San Francisco Examiner* (under William Randolph Hearst's authority) pushed the Federal Radio Commission (FRC) for frequencies and licenses to conduct such press service.

Perhaps the story is best told by someone who was there at the time: Ron Martin (RM), now W6ZF:

"6ARD and 2UO resulted because the Federal Radio Commission in Washington D.C. was stumped when the Hearst newspaper people and the *New York Times* asked for a license to send press to ships at sea. The *New York Times* wanted to cover the Atlantic and Hearst's *San Francisco Examiner* wanted to do the same in the Pacific. How to give these two publications licenses?

"The question was studied by the FRC, and then Mr. Mienholtz, of the *New York Times*, made the suggestion. Why not make a special category for press? The FRC

reacted with 'Oh! We couldn't do that!' So, Mienholtz and Roebuck suggested that they let the Times and Examiner try it out in the Ham bands on a very temporary basis, and see how it worked out. Both men knew that the ARRL would scream bloody murder if it were done on anything but a temporary basis. So the FRC did it. 2UO was assigned to the *New York Times*, and 6ARD was assigned to the *San Francisco Examiner*. The two stations started up with 500 watts each and, coincidentally, both stations used the good old Tuned Plate Tuned Grid (TPTG) circuit. The Times used two old RCA 204's at first. The light from those pure Tungsten filament tubes could light up a room! The Examiner station (6ARD) used a pair of UV204A's with the newer thoriated filaments in them, producing more emission and using less filament power. The TPTG transmitter used at 6ARD was built by Heintz and Kaufman. It was installed in the penthouse of the Examiner Annex Building on Annie Street to give the radio operating staff some isolation from the rest of the Examiner publication department.

"Finally, the FRC came up with a category for us. They called us 'Mobile Press'. The category was only for the *New York Times* and the *San Francisco Examiner* stations for sending press to ships at sea. The Times station became WHD and the

Examiner became KUP. KUP seems to have become the more famous of these two Mobile Press stations and outlasted WHD. (There is no listing of WHD in the 1932 Call Book as a press station.) The reason that KUP was so successful was probably because the KUP operators didn't just stop at press schedules. They worked the ships on the marine bands after each press schedule and provided whatever they requested. Ships ops often asked for details on fight news, stocks and bonds, etc., and the KUP staff did their best to provide whatever they wanted.

"We had a wonderful rapport with ships' operators. They used to send us letters and news and then would mention the special attention that KUP gave them. I urged my operators to be openly friendly to ships' operators and invite them to visit KUP when they were in port. I even talked George Hearst into giving me an \$86 expense account to take Captains and Operators out to lunch. Such public relations made KUP "THE PRESS STATION OF THE WORLD" and George Hearst and his dad, William Randolph Hearst were proud as hell of that, believe me.

"Yes, 6ARD/KUP and 2UO/WHD were the only two Mobile Press stations ever assigned in that category. I know of no other in this country or the world. Other marine stations sent press, but it wasn't as good. KFS and KPH and other marine stations that sent press were not

editorially minded. They would make up their press by reading an item in the latest newspaper and then sit down at the typewriter and make up their press to be sent. KUP operators used a razor blade, cut out the first two paragraphs of any item. The first paragraph told WHAT, WHERE, WHY, etc. in the standard press manner. That was the reason that KUP's press schedules were so interesting.

"Fred Roebuck (FD), my idol and good friend, was Chief Op at 6ARD/KUP. Fred left KUP after four months to become Chief Op at Globe Wireless marine station KTK. I became Chief Op at KUP when FD left, and five months later, George Hearst made me superintendent of the Hearst Radio System. I had Wes Wright (WW) as my day trick op, Frank Button (FB) out of the Navy, and Jay Raspiller (JY) as the third trick op. I used to sit in occasionally when I had the time. George, the son, and W.R. Hearst, the dad, kept me on the hop. I earned my monthly pay, believe me.

"KUP continued in Mobile Press service until 1937 when its license was suspended, nominally because the Hearst news organization refused to convert to a common carrier message service as did KFS and KTK. Hearst was used to criticizing government, editorially, whether local, state, or Federal. Hearst felt that the license he'd been granted for KUP was valid and

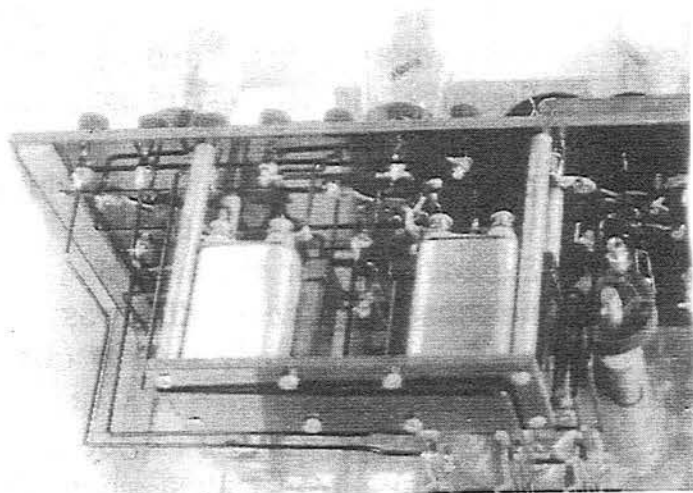
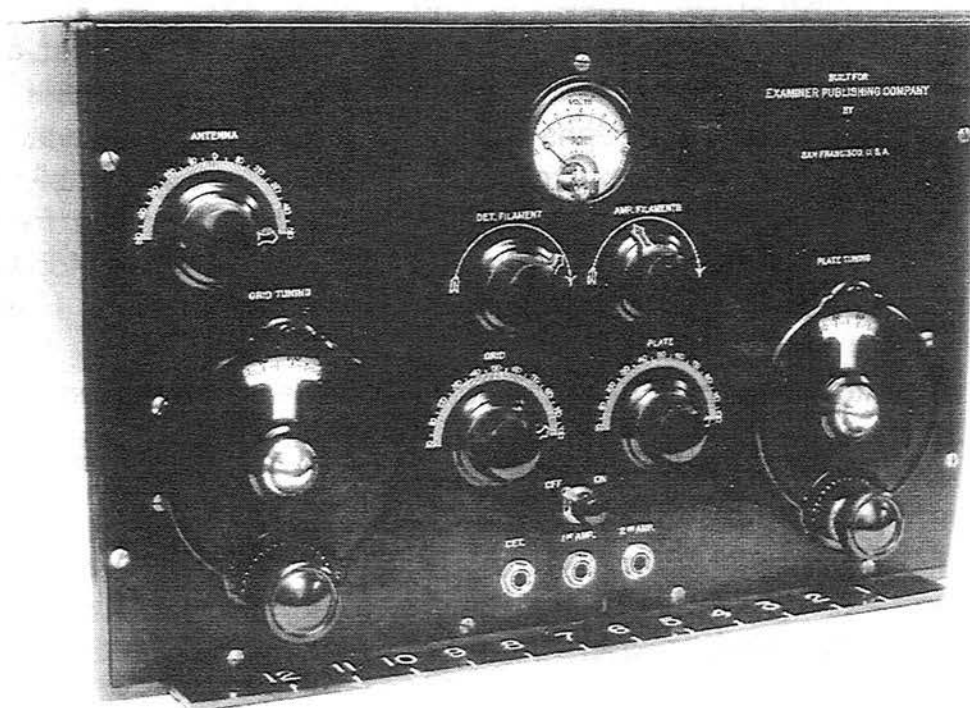
unrevokable, and went to press with editorials on the capriciousness of 'Big Brother' in changing the game rules, after the game had started. This was a war that could not be won, even by the Hearst newspaper empire, with its vast editorial power to sway public opinion."

A listing of the frequencies used by KUP in their Mobile Press service is shown in Table I (Ref. 3)

Table of High Frequencies used in Mobile Press Service by KUP:

6440 Khz
8320 KHz
11340 KHz
16700 KHz
22225 KHz

KUP always had a special relationship with KTK (Globe Wireless) and with Heintz and Kaufman, probably because of the tight friendships between Ralph Heintz, Fred Roebuck and Ron Martin. In fact, the site of KTK at Mussel Rock was one first used by Fred Roebuck and Ron Martin as a "quiet location" for receiving the weak press releases from the Sir Hubert Wilkins and Admiral Byrd Expeditions, for the Hearst newspaper system. KUP was apparently the only station outside of the Dollar/Globe/H & K group that ever used any of the HK255 gridless Gammatron tubes, since Heintz and Kaufman was entirely



These two photos show the high frequency receiver built for radio station KUP by Heintz & Kaufman, on the panel of which is inscribed BUILT FOR THE EXAMINER PUBLISHING COMPANY BY [HEINTZ & KAUFMAN] SAN FRANCISCO U.S.A. The second photo shows the receiver with the cabinet removed, three vacuum tubes are visible at the top. These photos are courtesy of Ralph Heintz, Jr. from Ralph Heintz Sr.'s picture album.

committed to making these tubes for Globe Wireless shore stations and Dollar steamships. KUP also had one of six of the Type HK920, 10KW transmitters produced by Heintz and Kaufman, the other five being used at KTK and other Globe Wireless shore stations. Over its ten year lifetime, GARD/KUP always had a close working relationship with the companies of the Dollar Steamship Line (Dollaradio, Globe Wireless, and Heintz and Kaufman.)

KUP was physically located in the sixth floor of the Examiner Annex Building on Annie Street, an alley that runs between Market Street in San Francisco and Ambrose Bierce Street, another alley. The high end of KUP's antenna system was suspended from an 85' mast on top of the Hearst Building (on Market Street) and the antenna system's lower end was supported by a 65' tower on top of the six storey *Call Bulletin* Building (another S.F. newspaper). This 500 foot span allowed for half wave, voltage fed antennas on the lowest two bands (6440 KHz and 8320 KHz), with the voltage feed points above the Examiner Annex Building. Also on top of the Examiner Annex Building were half wave, center fed dipoles, cut for each frequency for receiver use. Initially, both transmitters and receivers were located in the Examiner Annex Building since the operators of KUP had to be able to receive requests for "fills" from the

ships which had received incomplete text, cut to QRM, etc.

Because of its downtown S.F. location, with attendant urban electrical noise (especially the arcs of streetcar overhead power lines on Market Street) KUP was in need of a quieter receiver location. One of the quiet locations tried for KUP receivers and antennas was in the Ingleside district at Victoria and Head streets, near the present intersection of Highways 1 and 280. This receiving location sufficed for some years, until the Ingleside district began to be built up with residential congestion.

From the earliest days of Hearst's involvement with Radio, when the absolute quietest of receiving sites was required, as when listening for press releases of the Byrd or Wilkins Antarctic Expeditions, a remote location on the Pacific coast shore was used. A portable HF receiver, 90 volt "B" battery, and 6 volt storage battery would be loaded into Fred Roebuck's Hupmobile or Ron Martin's Ford, and a portable receiving site would be set up on the bluffs above "Mussel Rock" in San Mateo County. Receiving antennas were strung out in the mesquite bushes, and at an appointed time, FD or RM would copy the press release "blind". At the end of the press release, FD and RM would drive to the nearest farm house with a telephone and call in the release to the Examiner. The

These two December, 1995 photographs by Hank Olson, W6GXX show how little there is left of the once mighty radio station K U P.

The top photo is the former KUP transmitting site from Highway 101 at the fence, looking through the original gate to the station property. This is near the intersection of Smith Slough, Steinberger slough and Pulgas Creek.



The photo above is another aspect of the site of the former KUP transmitting site near Highway 101 in Redwood City. Note the 4x4 inch pilings from an old out building, and the Pacific Gas & Electric tower serving as the point of the high-tension lines "dog-leg" as remembered by Ron Martin, the former KUP manager. Note also the two telephone poles with cross-arms nearly submerged in the marsh. ##

Mussel Rock location is now part of Pacifica, and was later used by Globe Wireless until about 1960, as the site for KTK.

This method of blind reception of important press releases from special expeditions was successful because of the determination of the KUP staff to get news first and because FD and RM were two of the finest CW operators in the business. Not only did the KUP staff have good operating skills, but they also became "newsies" to a great extent. On one occasion, when KUP was maintaining hourly schedules with DENNE (the *Graff Zeppelin* on a round the world flight), RM and an Examiner photographer piled into an airplane and flew west about 200 miles to get the first news pictures of the big airship as it approached San Francisco.

When the receiving site at Head and Victoria Streets became noisy due to housing development, KUP established a new receiver site in San Mateo County near the junction of Highways 35 and 92, on City of San Francisco watershed land. The new receiver site was on Crystal Springs Reservoir land north of the present Skylawn Cemetery on Cahill Ridge. This area is still used for radio purposes. Just south of the KUP receiving site (on privately owned farm land) Globe Wireless also established a receiver site, known as SK, for "Skyline". SK was used in conjunction with the KTK

transmitter site at Mussel Rock until 1960. After KUP abandoned its receiving site on Cahill Ridge in 1937 and KTK abandoned SK, the site was taken over by Aircraft Radio Incorporated (ARINC). ARINC uses the SK site for HF and VHF transmitters to communicate with commercial aircraft flying the SFO to Hawaii route. There is also a Lockheed antenna test range nearby, as well as repeater block houses for UHF Cellular telephones and pagers. ...The KUP receiver site was unique in that it was built on San Francisco Watershed land, probably reflecting political alliances between William Randolph Hearst and City of San Francisco politicians of the time. The Cahill Ridge receiver site had antennas for all the HF assignments used by KUP as well as for KGXQ (Hearst's point to point HF license) plus LF capability for receiving 95 Khz and 99Khz signals from Hearst LF stations in Chicago and New York. The Cahill Ridge receiving station was remotely operated from downtown San Francisco, and its received signals were carried by phone line to the Examiner Annex Building.

Several years before the Hearst Radio System was forced to QRT, by loss of its licenses, a new transmitter site was built on the mud flats of San Francisco Bay in Redwood City. It was east of Highway 101, near the point where the present PG & E High Voltage

power lines make a dog leg. A red brick transmitter building was built at the end of a corderoy road across the ooze mud flats. It was so marshy that one of the D-8 caterpillars, which was left on the mud overnight was swallowed up during construction. (We must assume that pilings were put down for the transmitter building.) This transmitting site used one of the only Heintz and Kaufman, 10 KW, HK920 type transmitters ever used outside the Globe Wireless system. The HK920 used all air cooled tubes, including HK304's in its push pull Final Amplifier, requiring so much cooling air that the KUP/KGXQ staff affectionately called it "The Wind Jammer".

There were at least two other calls available to S.F. Hearst transmitter stations: KIP and 6XG. KIP was to be for 95 KHz and 99KHz, point to point transmitters at the Redwood City mud flats station. But experience in receiving the 95KHz and 99KHz from Chicago and New York Hearst stations indicated that these LF links would only be useful at night with the 10 KW power levels planned. So, Ron Martin advised that the LF transmitters not be installed. 6XG was only used by Hearst when using other than normal frequencies on an experimental basis, and KIP was never used.

And so, in 1937, the last vestige of what had been the small category

called "Mobile Press" came to an end. Other Press systems took up the slack, like Press Wireless Company, distributing news on a much broader basis, but perhaps with less of a personal touch. If one talks to any of the surviving ships' ops that sailed the Pacific in the 1927 to 1937 period, you're sure to hear positive comments about KUP like "What a signal they laid down."

Acknowledgements: The story above could not have been written without the help and encouragement of those listed below:

Mort Brewer, W6JU
 Ralph Heintz Jr.
 Ron Martin, W6ZF
 Bill Orr, W6SAI
 Ed Prather, W6GXF

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- 73 -

SHORT WAVE RADIO GOES TO WAR:

(Part Two) – ON THE HOME FRONT

By Bart Lee, xWPE2DLT
327 Filbert Steps
San Francisco, CA 94133
(415) 788 - 4072

Correspondence is invited.

Fifty years ago, thousands of Short Wave Radio Listeners followed every move in the Second World War from their armchairs and desks. Many were "Armchair Generals" such as Norman Rockwell painted for the Saturday Evening Post, as we have reproduced on our cover. Others listened more casually, as Rockwell also illustrated from time to time (as is shown nearby).

Many other shortwave listeners supplemented the work of the FCC's Foreign Broadcast Information Service (FBIS). These listeners carefully noted announcements by the Axis powers of the names of Allied prisoners of war. They then sent word to the families of these

soldiers, sailors and airmen that their loved ones were safe, albeit prisoners.

The FBIS noted prisoner of war names also, sending them on to the Provost Marshall of the Army for family notification. Needless to say, this bureaucratic process often took considerably longer than a letter or post card, or even telephone call, from a Short Wave Listener. Moreover, by reason of propagation or local conditions, or priorities, it is possible that the FBIS did not catch all names broadcast. Thus some families may have known the fate of their son or brother in the Armed Services only from the good work of a patient and dedicated SWL.

A typical story is told by noted SWL Hank Bennett :

"During World War Two, one of my SWL friends, who (to the best of my knowledge) never held a ham radio license ... did a magnificent job of tuning in the foreign shortwave broadcasts from the capitals and chief cities of the Axis countries; he used several receivers so that he could tune in

Listening Post!

ALEX. E. GORDON, Indianapolis, Ind.—legislative representative of the Brotherhood of Locomotive Firemen and Enginemen—brings good news to hundreds of mothers of missing servicemen, through his hobby and his faithful 16-tube, 1940 model



MIDWEST RADIO



BUY
MORE
WAR
BONDS

SEND FOR
FREE INTERNATIONAL
TIME CHART
CALENDAR

An attractive 4-color calendar with International Time Calculator will be sent **FREE** on your request if accompanied by 10c in stamps or coin for which we will send you a War Savings Stamp.



ALWAYS a short-wave radio enthusiast, Alex. E. Gordon has spent many a night listening over his 16-tube Midwest Radio to foreign broadcasts. Several months ago he noticed that the Nazis, along with their propaganda, were mentioning the names of a few American prisoners each night. Mr. Gordon began to jot down the names and sent post-cards to the parents of the men named. The response to these cards was so instantaneous and gratifying that Mr. Gordon induced others to join with him in a Short Wave Listeners Club—each member of which is allotted a definite time at his listening post.

Mr. Gordon feels that he is amply repaid for his trouble by such grateful expressions of appreciation he has received: "It is a patriotic service for which I cannot thank you enough" . . . God bless you for your kindness" . . . and other similar statements received by this Midwest Radio owner.

Just another case where a Midwest Radio, famous for its ability to pull in long distance stations even under the most adverse conditions, is doing yeoman duty, until Victory will permit us to turn from our production of radio and electronic devices for our Armed Forces and resume the manufacture of finer radio receivers—at lowest Factory - To - You prices and at savings up to 50%.

MIDWEST RADIO CORPORATION
DEPT. 11-G ESTABLISHED 1920 CINCINNATI, OHIO

two or more stations at any one time. He faithfully monitored every possible transmission in an effort to learn the names of Americans who had been taken prisoner of war. Reportedly, he was often able to notify military authorities or family members of the general whereabouts of missing servicemen before the military officials themselves were even able to get the information. I often wonder what happened to this fine gentleman who thus so ably served his country in a nonmilitary manner. He lived in one of the southern states and certainly should have received some sort of commendation from his appreciative government." [1]

An advertisement from Midwest Radio Corporation in the February, 1944 *Radio News* (reproduced nearby) tells a similar story. Mr. Alex E. Gordon used his 16 tube Midwest to monitor the War, and heard prisoners' names broadcast by the Nazis. He notified their families with post cards, and organized others to do the same. Reportedly, many such SWLs spend a considerable amount on postage and related expenses in the course of the War, which they considered as personal

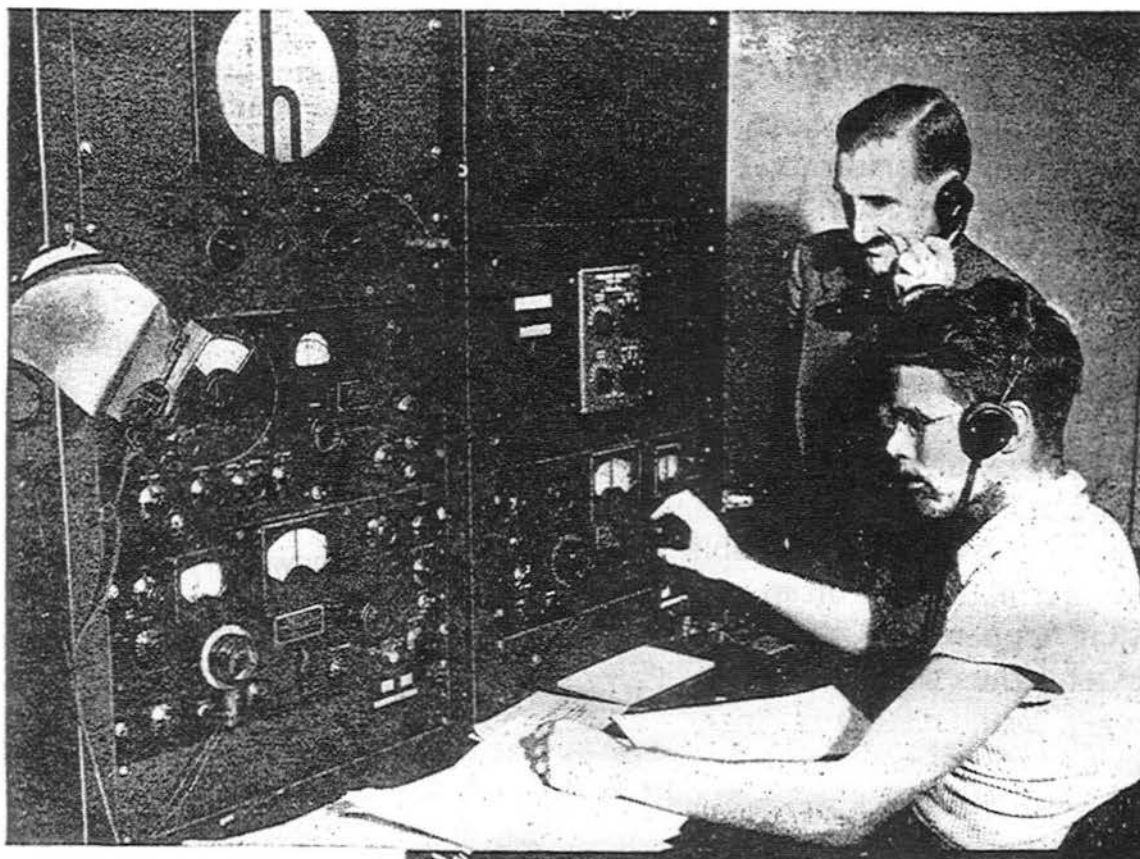
contributions to victory.

Many of the monitors at the FBIS had been prewar SWLs. They loved their war work, with all the SX-28s at their command. A wartime Hallicrafters advertisement (from *Radio News*, reproduced nearby) shows an FBIS listening station director and an operator tuning the control receivers at an FBIS listening post. These radios searched for new frequencies and programs. To the left was a bank of as many as 24 SX-28s tuned to programs for recording.

Individual SWLs during the war seldom had radios as good or antennas as large as the FBIS. Nonetheless, their dedication and effectiveness stands out, even half a century later.

Reference:

1. H. Bennett, D. Hardy & A. Yoder, THE COMPLETE SHORTWAVE LISTENER'S HANDBOOK (TAB, McGraw-Hill, 1994) (ISBN 0-8306-4347-8 (pbk)) at p. 6.



Listening Posts!

You will find Hallicrafters Communications Equipment working three shifts at our Country's "Listening Posts"... searching the airways for illegal programs and espionage messages.

Hallicrafters Communications Equipment is engineered to "take it" on this constant operating... there are no rest periods, no time out, it's constant performance!

The Hallicrafters Equipment you can buy—when communications equipment may again be sold for Civilian use—will incorporate all of the endurance and top quality performance you will ever demand.

Illustration—typical view of Hallicrafters Communications Equipment is a monitoring (listening in) station—somewhere in the U.S.A.

**WORLD'S LARGEST EXCLUSIVE MANUFACTURER OF SHORT WAVE
RADIO COMMUNICATIONS EQUIPMENT**



hallicrafters

CHICAGO, U.S.A.

SHORT WAVE RADIO GOES TO WAR:

(Part Three) – LISTENING TO AMERICA

By Bart Lee, xWPE2DLT
327 Filbert Steps
San Francisco, CA 94133
(415) 788 - 4072

Correspondence is invited.

This note is based primarily on HITLER'S SPIES by David Kahn [1], and WAR SECRETS IN THE ETHER by Wilhelm F. Flicke [2] (which I have courtesy of Will Jensby). Kahn does not seem to have had access to Flicke's work.

During the Second World War, America through the Voice of America, the British through the British Broadcasting Corporation, the Russians through Radio Moscow, and, of course, the Nazis and the Italian Fascists all broadcast propaganda to each other on shortwave radio. Once the British Broadcasting Corporation implemented its novel policy of truth-in-propaganda, its broadcasts into Germany became well regarded by their listeners. Despite the penalty of death for listening to the BBC and other foreign broadcasts, many did. The Nazis jammed it but could not jam all transmissions. [2] The then new Voice of America was hard to hear and not much favored by Germans, except the programs

of the noted writer Thomas Mann, "inspired by a glowing hatred of National Socialism." [2] Two American clandestine stations were popular in Germany, the Atlantic Sender and the German Freedom Station. [2] At least one clandestine station in England, Gustave Siegfried Eins, used so many obscenities it became known as the *Scheissensender*. It was, however, not popular and disrespected.[2]

Shortwave broadcasting into Germany, certainly American broadcasting, did not much affect the outcome of the war, just as Nazi propaganda had little or no effect, and perhaps strengthened Allied resolve. An outstanding historian of the use of radio in the Second World War, from the German perspective, was Wilhelm Flicke [2]. He concluded:

"The importance of the English, Russian and other broadcasts seems to me to lie in another quarter [rather than as effective propaganda]; they helped the German people in its search for truth, in its efforts to learn the real relations of things, in its conscious and unconscious urge for spiritual recovery, in its search for a way out of the labyrinth of aberrations. If, after the outward collapse of the national Socialist reign of terror – a collapse which

was inevitable – the German people showed that a vast majority had long since broken with that negative system and created conditions favorable to a positive course, then a good part of this cure may be ascribed to the critical searching of the broadcast frequencies. Broadcasting showed that it can only be an effective weapon if it uses the truth.” [2]

Just as we and the British monitored the shortwave broadcasts and press transmissions of the Axis powers for intelligence purposes, so too they listened to us. Nazi leader Joachim von Ribbentrop (a polyglot former champagne salesman) was the Foreign Secretary reporting directly to Hitler as Chancellor. He established a monitoring group comparable to the U.S. FCC's Foreign Broadcast Intelligence Service (FBIS) in Germany, under Nazi officials Alexander Mair initially, then Hans A. Welms, and then Helmut Albrecht. [1]

Inasmuch as it had a lakeside site, it was known as “*Seehaus*” or more formally the *Sonderdeinst Seehaus*, the Special Service Lake Facility. [1] It was much smaller than the FCC's (FBIS) and not nearly as well organized. Ribbentrop used it primarily as a personal intelligence gathering asset, but he had to

share it with Joseph Goebbels. Herman Goering also set up a “Research Department” dedicated in part to radio interception, the *Forschungsamt*. [1,2]

Alexander Mair set up the *Seehaus* in July, 1940. Before then several organizations monitored shortwave broadcasts and especially press transmissions, including the Reich Radio Corporation in Berlin, and the DNB, the official wire service, and the Foreign Office itself (which monitored the first news of the Japanese attack on Pearl Harbor). [1]

By October, 1941 Ribbentrop and Goebbels had agreed to set up the German Foreign Broadcast Company Interradio, Inc. mostly for broadcasting abroad but also for monitoring, primarily at the *Seehaus*, with monitoring posts in France, Denmark, Hungary, Italy and Poland as well. During the war, *Seehaus* grew to a capability to monitor 37 languages from more than 40 countries with its 700 and more workers. Monitors had to know foreign languages and translate. [1]

Each monitor listened to the same program on two receivers on different frequencies. This dual diversity technique compensated for adverse propagation

and atmospheric conditions. *Seehaus* used radio frequency amplifiers and signal splitters through an RF switchboard, all from one omnidirectional antenna. In any given year it picked up thousands of broadcasts and hundreds of speeches by Allied leaders. All British broadcasts and most American broadcasts were heard, and the important ones were recorded. The reports from *Seehaus* were generally fastest to their Nazi consumers, after those of the DNB press summaries, but not necessarily regarded as the best. [1]

German military intelligence (OKW) also had at least four major listening posts. Its Cipher Branch put out reports on broadcasts heard. (*OKW-Chi-Nachrichten* [News]). Some 3,000 workers monitored and processed radio intelligence for OKW-Chi, primarily near Berlin and Nuremberg, where 150 monitors used a six tower antenna farm at Lauf under the direction of Herr Flicke, who opposed Nazi policies. [2] The two main posts backed each other in their target areas, such as British, or Russian or American transmissions. OKW-Chi devoted itself primarily to interception of point to point diplomatic and military traffic, and decryption. [1]

The Nazi Navy and Air force also

ran monitoring and intercept posts at all levels, often for more than tactical purposes. The Army OKW intercept service was run by General Erich Fellgiebel, until Hitler had him executed in 1944 for plotting on his life. [1] His subordinate, Herr Flicke, wrote after the war the best history of German radio intercept work, *WAR SECRETS IN THE ETHER* [2]. Flicke noted that the German radio intercept service was entirely too fragmented, with almost a dozen organizations. He concluded that, except for tactical intercepts by each of the naval, air and ground services,

“... all other facilities for monitoring the radio traffic of foreign countries should unquestionably be combined in one central organization.” [2]

This conclusion is perhaps the reason the U.S. National Security Agency, after the War, published his work, it being thus so centralized.

As early as 1940 and 1941, OKW-Chi Group III developed a device to unscramble the radio-telephone calls between President Roosevelt and Winston Churchill. It was presumably a vacuum tube analog computer, for it was

"a complicated apparatus ... constructed at great cost, based on the recognized rhythm of the known distortions." [2] Hitler read near current transcriptions of these calls. A change in the Allied scrambling system put the device out of business.

Perhaps the greatest success the Nazi's had in interception of Allied traffic came in the North African campaign of 1942. General Rommel earned his sobriquet The Desert Fox with his battlefield prescience. What was actually going on was more mundane: OKW-Chi was intercepting and deciphering the communiques of the American Military Attache in Cairo. He was reporting to the State Department in Washington every move and plan of the British, and OKW-Chi at Nuremberg passed on his reports to Rommel. [1,2]

The U.S. used a world-wide network of at least ten radio stations that the Nazis called the KVNA-net, after the VNA call sign of the first heard station in Karachi, now Pakistan. Station WAR in Washington was the central station. The Cairo station was WVN. Flicke reports that most of the traffic on this American net "could be read currently; it afforded information on American military measures in the Far, Middle and Near

East and in Africa." [2]

On June 27, 1942 a German station broadcast a radio drama about the war in North Africa, one of the characters of which was the American attache in Cairo who sent detailed reports back home. Transmissions and thus intercepts from the real attache stopped two days later. [2] A change of the American code soon deprived Rommel of the best strategic and tactical signals intelligence of the war. He was unaware of Montgomery's coming attack at El Alamein, the turning point of the war in North Africa and in the west.

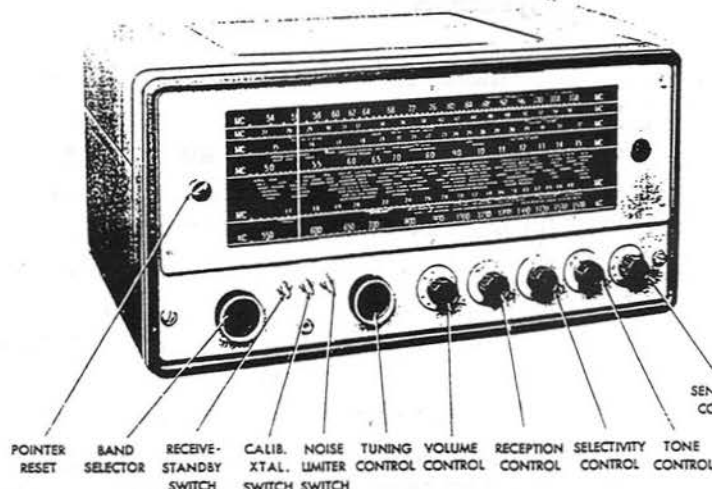
The British more than got even for the part radio interception had played in the North African campaign, with a radio deception that helped to save the Normandy invasion of 1944. The British convinced the Nazis that their supposed agent CATO could obtain the highest secrets by sending a message from him to Germany that the Allies would indeed invade Normandy on June 6, although he sent it so late it was of no use. It did, however, establish his credibility. He then sent another message on June 9th that the real invasion was not Normandy, but farther North, and Hitler believed it, holding crucial Panzer divisions in reserve. The rest, as they say, is History.

RECEIVER RESURRECTIONS

I. RESUSCITATING A HALLICRAFTERS SX62A

by John Gibson
1075 Sterling Avenue
Berkeley, CA 94708

Last year when buying some angle iron at a local scrap metal dealer, I saw an interesting shape in one of the hoppers. Rectangular, black, with a line cord attached. It turned out to be a Hallicrafters SX-62A. The SX62A is a 16 tube communications receiver built around 1960, covering 540 khz to 109 mhz in six bands.



This one, however, was in a sad condition, it looked as if someone had dropped it out of a third floor window and it had landed on the sidewalk upside down. The steel cabinet top was crushed in about an inch and the beautiful 155"x5" glass slide rule dial was totally shattered. Still it had good knobs and perhaps one or two tubes had survived the fall. The junk dealer was a good sort and gave me the radio free because I was buying a lot of scrap iron along with it.

At home I eased the chassis out of the cabinet. "Hmm, doesn't look bad at all." After dusting and washing the chassis with hot water and detergent it looked near mint. Miraculously the tubes all checked good. Having a nice chassis made me want to find a good dial and cabinet for it. (The restorers curse was setting in! You find a nice part of something and you have to have the rest of it).

A few weeks later I was at the Los Altos Ham swap meet and had survived the dawn stampede when I espied a familiar object in the back of a pick-up. It was in poor condition, the knobs and other hardware were missing but the cabinet and dial were intact. To my delight, my offer of \$10 was accepted for the SX62A.

After a light sanding and two spray coats of semi-flat black enamel, the cabinet looked factory fresh. The dial on closer examination was not so good. There were tiny areas where the paint had flaked off the glass. I did the only possible thing. I put an ad in the Antique Radio Classified requesting a dial. There were three replies. Two of them admitted to small areas of flaking paint so that must be a weak spot of the SX62A. The third reply was more promising. He had also had the problem of finding a satisfactory dial so had borrowed a SX62A with a perfect dial and had it photographed as a positive image on thick base film stock. He had a spare copy for \$25.

I sent off for it and on arrival it looked good and was in razor sharp focus. It was installed following the instructions to sandwich the film between a sheet of clear and a backing sheet of white translucent plexiglass. The sheets cost \$3 for both, cut precisely to size by Tap Plastics.

Finally the set was switched on and the many panel lamps illuminated the dial from the rear. Gorgeous! -- 73 --

II. REVIVING A HALLICRAFTERS S-38C



by a mysterious CHRS member.

I traded for my Hallicrafters S-38C at a CHRS swapmeet. "Does it work?" I asked. "Oh, yes!" the seller replied. Upon getting it home, I found that it had an incredible AC hum that overshadowed even AM broadcast reception. I tested the power supply filter caps on our Sencore Capacitor Tester at work. All three caps in the cans were very leaky. They did not reform on their rated voltages, even overnight. I was then obliged to pry the can open, and replace the caps with modern (Nichicon) units. I sealed the can with paraffin, and the results were indistinguishable from the original.

With this rectification* [* use a pun, go to prison -- ed.] I then tested the tubes. All checked fine. I did, however, replace the JAN metal cased tubes with vintage glass envelope units. The radio now worked. It was, unfortunately, way off frequency. To align the receiver, I borrowed a buddy's EICO Signal Generator, and also used a frequency counter from work. After the AM band, I soon found that the frequency counter lacked the sensitivity to work the short wave bands accurately. I therefore trusted to "Kentucky Windage" and the EICO Company to align the short wave bands. Lacking a schematic, I turned one cap at a time to align methodically the three short wave bands. I then marked and sealed each cap with a drop of White-out.

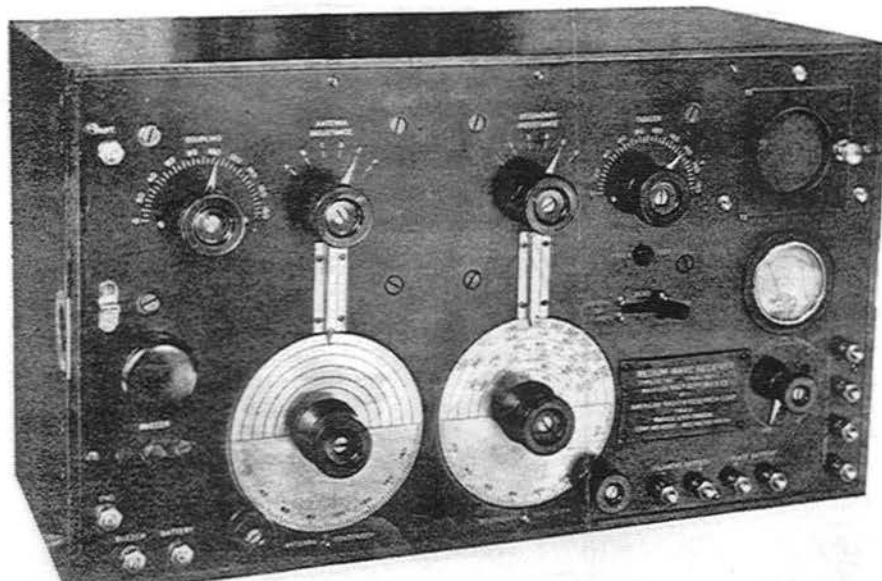
Finally, alignment was done. Was the old EICO close enough? I wondered. The proof would be in the pudding. I attached my short wave long wire antenna to the old Hallicrafters, and tuned in. Not only were the AM broadcast stations bang-on, I also found WWV at exactly 5, 10 and 15 megacycles with bandspread at Zero! I extend all kudos to the late EICO Company for a job well done!

Then a **PURPLE FLASH** and dead silence, as I connected the radio's ground terminal to a cold water pipe outside the window. Upon further investigation, I found that the RF amplifier, a 12SA7, no longer worked. The filament lit up, but with no emission. I supposed the grid or more had vaporized. I replaced the tube, and investigated my house's ground. *I found that the water pipes were actually **HOT***

What to do? Isolate the ground. I used a 0.001 mf at 600VDC Mylar cap to bypass the ground terminal on the beaverboard back panel of the radio, and another in series with the antenna terminal. This prevented an further monkey business with poor grounding. The S38 then worked probably as well as it ever had, considering it is a six tube, transformer-less AC/DC job which probably sold for \$29.95 plus two box tops when new. With the new Mylar and modern electrolytics, it may just work for a couple of more years. -- 73 --

Editor's note: This is a nice story and we'd like to know who submitted it, so we can give credit where credit is certainly due. As a matter of safety, keep in mind that any DC (as opposed to RF only) ground is potentially deadly. If you get caught between any voltage and any DC ground, the volts send the amps through you to the ground. Such a jolt can take your life. As this last tale shows, what looks to you and me like a DC ground can also be electrified, with the same potentially fatal consequences. So it would make sense to make sure only one place in the shop or shack is a ground, and that it is isolated by a high voltage capacitor to make sure no amps go through you on the way home. -- 73 -- ed.

THE SE-1420/IP-501 RECEIVER



I'm looking for some parts to restore an AMRAD SE-1420C receiver. I'm writing to ask if you might possibly have such parts to sell or be able to steer me to someone one else who could help. Original parts are of course preferred but reproductions would be OK as well. Here's a list of the pieces needed.

- 2 or 3 - Coupling/inductance tuning knobs (large)
- one - Filament current control knob (small)
- one - Buzzer & its dome shaped cover, 1 5/8" diameter
- 2 - Binding post nuts, see attached sketch
- 4 - Binding post studs, see attached sketch
- 4 - Binding post spacers, see attached sketch
- 1 - American Radio & Research Corporation (similar to butterfly shape) SE-1420 nameplate. Or some hard rubber, composition or Bakelite sheet stock, about 3/32" thick; 2 1/4" x 3 3/4" or larger, from which I can make one.

Of these items, the one needed most is the buzzer since it would be extremely difficult to reproduce. It is possible that such 1 5/8" (base diameter) buzzers might have been used on some learner/practice keys. Regarding the knobs, I only need the molded pieces. My metal pointers & dials, etc. are fine. For your reference, I'm enclosing a photocopy of an OTB article which shows the exact SE-1420C model that I have.

Very truly yours,

A handwritten signature in cursive script that reads "Dick".

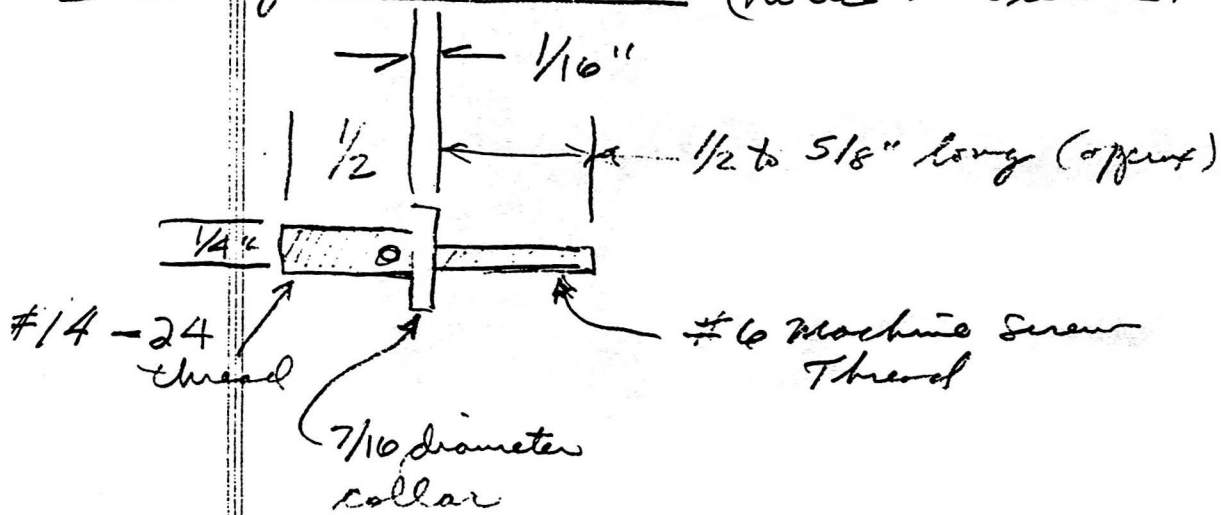
Dick Kowalski, KB8MR

32823 Gloede Dr.
Warren, MI 48093

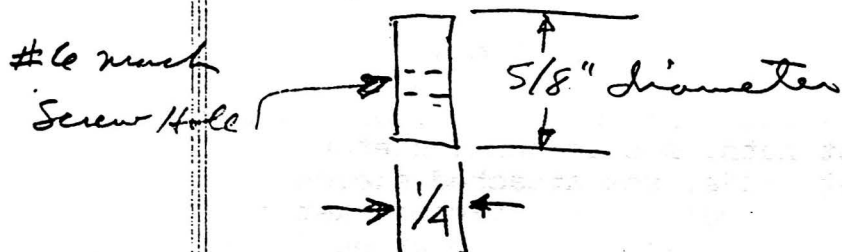
(810) 294-6831 evenings. office hours (810) 294-4117

SE 1420C Parts Needed

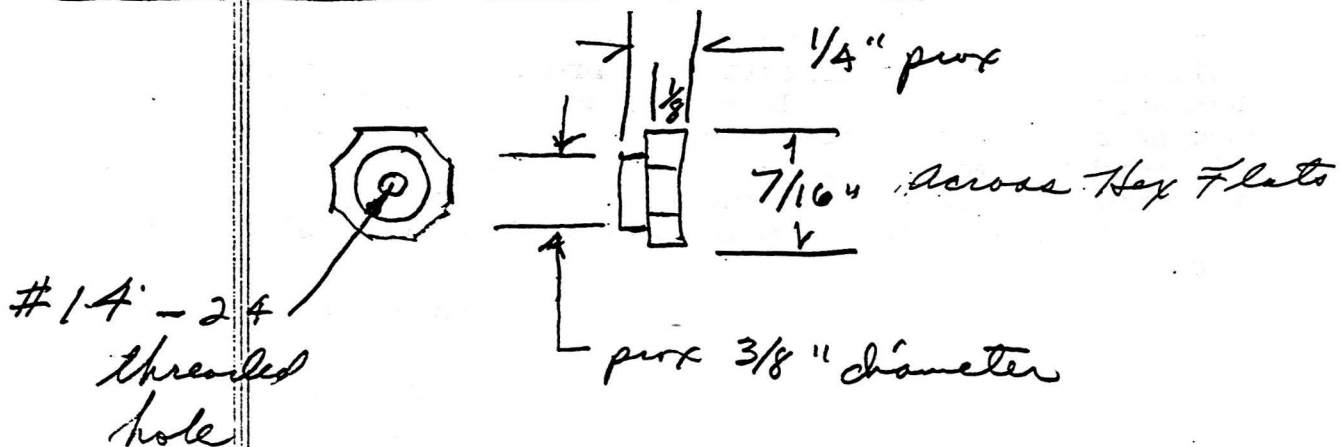
Binding Post Studs: (Notice the wire hole in $\frac{1}{4}"$ d



Building Post Spacers - Looks like bobelite or fiber material



Building Post Holes



HOW IT HAPPENED, CHRS, THAT IS

by Eugene Rippen, Esquire,

*a founding member of
the California Historical Radio Society*

110 Maple Street, ste 5
Auburn, CA 95603

In 1974, having talked it almost to death for years, Jim Cirner and Norm Berge were sitting in Jim's living room one evening once again discussing the prospect of an antique radio club for the West Coast. They believed they already knew enough collectors in Northern California, alone, to make a success of it. They decided to quit talking it and just go ahead and do it.

The first thing that Norm and Jim did was to get a nucleus of collectors who would help them start it up. A few phone calls later, the original seven charter members were lined up to go to work.

Norm Berge was the first president. At the time he was working in the engineering department of Stanford Medical Center. Although he had only been collecting for four years, he had great enthusiasm and had already amassed over 150 radios in his collection. Norm had been repairing sets since the 1940's.

Jim Cirner, treasurer, was working for N.A.S.A. at the Ames Research Center in Mt. View. Jim already had over 250 radios, along with quite a collection of other radio items. He started repairing in 1948 and collecting in 1950.

The other five that Jim and Norm had hustled up were: Vice President Dave Brodie, a ham operator since 1955 and already a repairer and collector of old radios; but most important to the club at the time, he was a CPA. Second vice president Peter Brickey, a Hewlett-Packard employee,

got interested in old radios in the early '60s and began collecting them in 1971. He had a broad interest from early wireless to '40s consoles.

Robert Middleton was one of the first seven. He had been into radios for a long time as the author of many technical articles that were published in many different magazines and other publications.

Our first editor of the *Journal of the California Historical Radio Society* was Ken Miller who was then working for Varian as an Electronic Engineer. He, too, had only been collecting for a couple of years but had that great newcomer enthusiasm. He had been a ham and already had about 30 sets in his collection.

To those six other original members you can add myself. Conveniently I was an attorney and did all that legal stuff to get it all official. At that time, I was also a newcomer to collecting, although I had amateur and commercial licenses and started repairing radios in 1937.

Although he was not actually one of the seven charter members, Larry LaDuc, Jr. was the club's first historian and had been collecting about two years at that time, collecting a mixture of everything: battery, crystal and AC sets.

As it turned out, Jim and Norm were more than right. By the time that the first issue of CHRS's Journal was printed in September of 1975, only four months after CHRS was formed, the club had 25 members, and seven of them were from the Los Angeles area. Interestingly, the logo of the club, namely the Crosley Pup, had already been selected and began being on the covers of the Journal with the very first issue.

Being in the San Jose area seemed even more appropriate since it was the site of KQW, the world's first commercial broadcasting station. In fact, within a year, Jim and Norm had located the old KQW transmitter in San Francisco where it had

been moved when KQW became KCBS and they got the station to donate it to the club, which in turn got donated to the Foothill Electronic Museum.

Under the regime of the initial officers, the swap meets were begun, some of which were in collaboration with AWA, complete with programs and guest speakers. In fact, at the second meet, Ray Newby was the speaker. In 1909, when Newby was just 16 years old, he provided Doc Herrold with the spark gap for first KQW transmitter. He also taught radio at Doc Herrold's technical school. Norm Berge tells me that he still has the tape recording of Newby's talk at that meet.

The original officers remained the same until September of 1978, with the exception of Allan Bryant, taking over as editor in the summer of 1977.

Robert Middleton and Dave Brodie are deceased but the rest of us are still around. Jim is retired from N.A.S.A. living in San Jose, still repairing and collecting and is now in the antique business in San Jose. Norm is retired and living in Kingman, Arizona and collecting radios, records and even old big band posters. Kenneth Miller is still active and living in Fremont. Peter Brickey still collects and is living somewhere in the Santa Cruz Mountains. Larry LaDuc is in Campbell, California and is still collecting.

I have become a member again after having dropped out while in the Title Insurance business. I'm now in Auburn, California practicing law and I've got a couple of antique stores; about as retired as I'll probably get and looking forward to CHRS' next 20 years. -- 73 --



STORSAMLER: Paul Gigante, Kalifornia, er en av storsamlerne av elektronikk fra pionértiden. Her med en 1-rørs Magnavox-radio fra cirka 1920. (Foto: M. Lein)

ÆRESMEDLEM: John Wentzel, San Francisco, driver fortsatt sitt meget velutstyrte radioverksted fra 1930. Han reparerer det meste samlere og andre interesserte bringer inn fra radioens barndom. Så vidt vites er historien om verkstedet hans enestående i verden. Her utnevner artikkelforfatteren ham til æresmedlem av Norsk Radiohistorisk Forening. (Foto: Mrs. John Wentzel)



VINTAGE RADIO IN NORWAY

by Magne Lein

Address: Villaveien #5,
1440 Droebak, Norway

I work as a co-editor for CAD/CAM in Computerworld Norway (a subsidiary of the US magazine). I was also three years as a technology attache at the Technology Office of the Norwegian Consulate General in San Francisco. I happened to hear about John Wentzel and his Aladdin Radio Repair Shop. I also ran into Paul Gigante at one of the swap-meets at the Ampex parking lot. John helped me to repair the Jensen speaker of the Grebe set (1927) I bought at the San Francisco CHRS swap meet in the school yard near John's shop in 1992.

I bought two Atwater Kent breadboards (No. 9 and 10) from Paul and also some other stuff. Recently I ordered a power supply kit for the breadboards from the Texas outfit selling books and old parts.

My interest in radios date back to 1945, when I was eight years old. At that time, they sold a lot of used German military sets. My uncle Bjarne also started working in a radio repair shop. He helped me a lot, among others, when I made my first radio, a copy of the WW2 "Sweetheart" set. I was 11 at that time.

So I focused more and more on radios, even if my father was a sixth generation blacksmith with his own shop. Later I got a Master of Science degree from the Norwegian Institute of Technology in Trondheim. One of the main textbooks we used was Stanford professor Frederick Terman's book on radio.

On the first page of my recent Computerworld article (it is one of four on

the "roots" of electronics and computer science) is a photo of Mr. Jan Wessel. He established one of the first radio factories in Norway for his brand "Radionette". They made among others, as far as I know, the world's first radio (1925) with an integrated mains supply (220V). Their "Kurer" portable radio was the most sold model on the export markets in the 50s. It was excellent in the shortwave bands.

Later Radionette merged with Tandberg Radio. Today Tandberg is split into six different companies with products like computer terminals, streamers (they are the IBM Rochester factory's largest back-up streamer subcontractor for the IBM AS/400 system), language "laboratories," based on their excellent tape records, high quality video conference equipment (70% of the world market). Still they make radio and audio products. Their receivers/amplifiers were recently ranked No. 1 in a test at the main Hi-Fi and Audio test lab in Germany, better than Sony's and other manufacturers' equipment. Their semiprofessional tape recorders are also at the top, as they was already in the 50s. So they are still going strong. The name of the radio factory is Tandberg Audio Products. Today Tandberg is the only radio factory in Norway. We had 60 of them in the 1940s!

At the moment, I am restoring a couple of Garrard (French) record shifters and an old His Masters Voice record player with a horn made of oak wood. My collection mostly consists of European radios. From the US I have radios from Atwater Kent (among others the two breadboards), the beautiful Grebe floor cabinet, Zenith (Trans-Oceanic and others), Emerson (mod. 520/Catalin and others), Motorola (several), Crosley, Westinghouse (several), Philco ("Cathedral") and Ward.

-- 73 --

REFLECTIONS ON THE RADIO HOBBY

by Stan Lopes
1201 - 74 Monument Blvd.
Concord, CA 94520

I first developed an interest in collecting old radios in 1975. I had been exposed to radio in John C. Fremont High School, class of January 1942, and trained by the U.S. Navy in Electronics. My mother acquired a 1938 Philco Chairside radio under odd circumstances. Owning a restaurant in 1938-40 in a medical building in Oakland where dad and I often "Pearl Dived" (washed dishes), mom was approached by a regular customer who wanted to borrow \$5 (a lot of money in 1938) for a brief period and use as collateral the aforementioned Philco Model 38-15 which appeared new. How could she resist an offer which seemed foolproof? The deal was done, but the individual never returned! Maybe it was "hot." Naturally, the radio was carried home and became a part of the living room furniture.

Over the years, the Philco served the family well, and I can still remember my dad listening to the war reports on short wave from Europe. As the years passed, the chairside set became a bit worn and mom decided to antique it. For those of you who missed this decorative art in the 50's, it consisted of a base of flat paint in your choice of colors (mom chose ivory) which was then dressed up with a gold paint streaked on with a cloth. Elegant! After a time, I talked mom out of the inoperative humming set and set out to strip the mess using the paste type of paint stripper. This went on for a few weeks with the application and scraping taking part of each weekend, until finally I could sand the cabinet, stain and apply a few coats of spar varnish to what appeared to be a mahogany

veneer. The end result was brilliantly beautiful. After a handful of parts, it looked and played as I remembered and at a subsequent CHRS swap meet contest, I was awarded first prize in the Unusual AC radio category with a ribbon and certificate. By now the disease had taken control and other sets began to join the Philco. Initially the idea of collecting just Philcos sounded great (as other collectors can attest), but some of the other brands of sets were beckoning and were hard to resist. In those days, the swap meets, flea markets and garage sales were cleaning up on table models by collecting 50 cents, a dollar and even two dollars for the good ones. New collectors please turn green with envy and don't get any of the drool on this Nobel Prize literature.

As a technician, repair of sets became another nice aspect of the hobby virus. For awhile I even had a Bureau of Electronic and Appliance Repair (BEAR) registration and a license from the city that I reside in. But after a few years of too much paperwork and three major surgeries, I decided that I no longer wanted to contribute to the State or city coffers and my business hobby "swindled down to a precious few." Over the years I acquired some nice sets and sold some of them to finance other purchases. The metal radio fad came along about the time Catalins were fading into the sunset and I acquired some of those. Along the way have come some keepers like my Sparton Bluebird purchased for \$275 and now worth a few dollars more. Emerson's Snow White and the Seven Dwarfs radio (\$150) and a few others not worthy of mention, but which I often wish I hadn't parted with. I have been a sucker also for the paper side of Radio and have a five tiered bookcase stuffed with old up to the very recent books on radio as well as piles here and there.

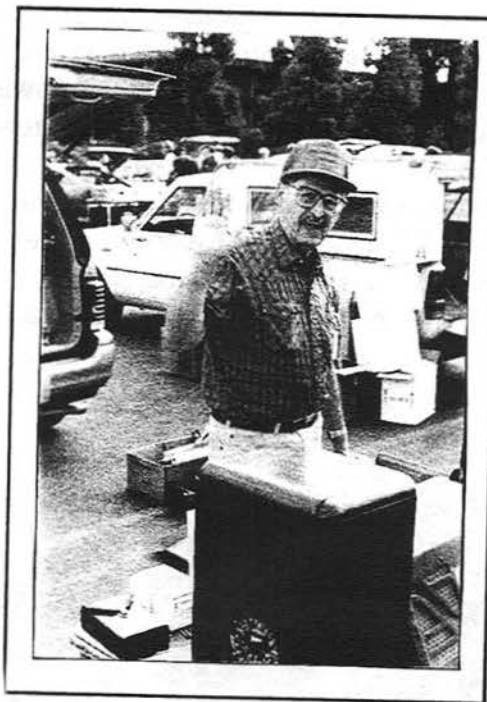
Nothing brings me more pleasure than to take a silent, dirty chassis and bring it back to life with that special sound that only a 5000 cycle (I refuse to go Hertz) bandwidth can coax out of those old speakers. A purist I am not when it comes to replacing parts in a radio. If a part has lasted 50 or more years and is still performing okay, I see no reason to replace it, but if the electrolytic can isn't even capable of even 1 microfarad amongst its 2 or 3 sections, I have no compunctions against disconnecting it (a must) and installing individual pigtail (or axial) filter capacitors under the chassis where they are not seen except by another technician or collector when the chassis gets pulled again. Since I use mostly 600 volt orange drops capacitors by Sprague, the chance of that is slim. The idea of melting the black crap out of a Philco block capacitor and installing orange drops or metallized film capacitors (which are smaller) is revolting to me in consideration of the amount of work involved. By the same token, Zenith owners needing a fabric belt to tune their lovely can search the world over instead of using an O-ring costing much less.

One item I have used somewhat jokingly in my sales flyer and in ads in ARC is that I provide free advice. Boy! I've really had some doozies write and ask for something so far out that you wouldn't believe like an "original whiz-bang for my whoop-de-do 16 tube homebrew made by some fellow named Marconi." However, I have helped a few collectors and have been helped in turn by free advice. The point I want to make here is that the Radio hobby is F-U-N and every day brings another: Mystery - why don't it work after I replaced all of the capacitors, some tubes and a few resistors? Surprise - I installed a brand new 80, plugged it in and the circuit breaker kicked (or fuse blew). Or a Prize -

something you always wanted like a nice Crosley Pup in the trash or in a thrift store for \$5.

Sometime after I wrote the foregoing, a customer friend brought me a neat Sears Silvertone four knob set about half the height of the average tombstone with tuning eye and gold dial that a Sanitation Engineer friend found discarded in the trash in Lafayette. Cost = \$0. Today I see radios at the swap meets that were once what I call reasonable selling for more than I want to pay. If it is in my reasonable category, it maybe has something I miss that will cheapen it or make it impossible to fix. You win some, you lose some, but in the meanwhile it is a great time. Best of all is the camaraderie at swap meets, on the phone and in the mail that binds you to the others who share the same interests.

I still have my Philco Chairside and about 60 others with 12 metal sets (not including the Crosley Pup). Awaiting TLC in my storage are more than enough sets to keep me off the streets and out of the bars for years.



Stan Lopes

FOR SURPLUS HOUNDS:

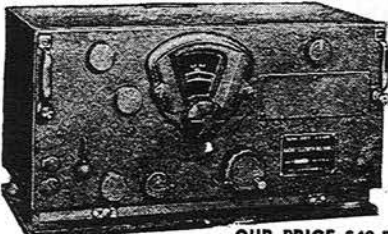
THE ULTIMATE BC-348 CONVERSION

by Henry Engstrom, KB6KWH
P.O. Box 5846
Santa Rosa, CA 95402

In the process of collecting vintage radio equipment, primarily Second World War military gear, I've found myself sometimes becoming too serious about getting that piece that will help to complete a set or getting up at some insane hour of the morning so as to be early at the monthly hamfest. I find myself spending hours on the phone, pursuing some necessary piece or sending out want lists to snag that elusive FC-10 filter for the BC-474. It was while reflecting on the seriousness, that the idea of the ultimate surplus radio BC-348 "conversion" was born. I therefor submit this article for the April 1, 1996 issue of the C.H.R.S. *Journal* (although only God only knows when you'll actually get it out!)

COMPLETE CONVERSION DETAILS FOR MAKING AND OBSOLETE BC-348 RECEIVER INTO A PENCIL SHARPENER

Numerous articles have been published in the years following WWII showing various ways of converting surplus military communications equipment into all manner of supposedly useful devices. Most have required fairly technical knowledge, and somewhat complicated circuit rewiring schemes. This conversion requires only basic mechanical skills and no knowledge of electronics, and is the perfect "rainy day" project. When completed, you'll have a useful addition to the ham shack and one that fits well with the existing decor. In addition, your friends will, no doubt, marvel at your ingenuity.



**SENSATIONAL
BC-348 RECEIVER**

200-500kc and 1.5 to 18mc in six bands! Crystal I.F. Filter, 2 Stages RF, Combined RF and AF Gain Control, High-ratio Vernier Tuning Dial, Built-in 24v dc Dynamotor which is easily removable for AC pack installation. Two phone jacks on front panel, one for loud-speaker operation. Has 2 stages transformer-coupled audio, BFO Manual or automatic volume control. This is the most wanted surplus item. Limited stock. First come, first served.

OUR PRICE \$49.50, Complete With 8 Tubes

• We Can Also Supply This Same Receiver With Built-in 110 v. AC 60 Cycle Power Pack—Ready For Operation.....\$69.50

BRAND NEW BC-348 IN ORIGINAL FACTORY CARTONS, GUARANTEED UN-USED, WITH TUBES AND DYNAMOTOR.....\$59.50

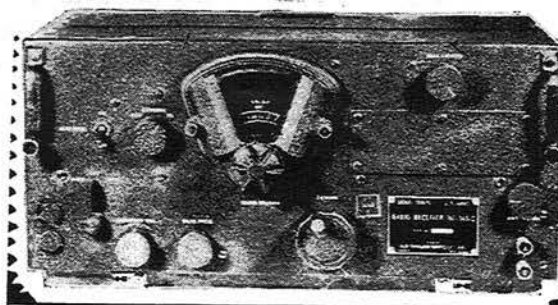
BRAND NEW 110 V. A-C MODEL.....79.50

The BC-348 receiver, as we all know, served its time in uniform quite admirably in the radio room of a B-17 or B-29 (and other aircraft) during WWII. It served well and patriotically until 1945 and even after. Military service honorably completed, the BC-348 graced radio rooms throughout America as hams went back on the air. That was then but this is now, however. It's time to move on to a new era, and a new use. Following are complete plans for converting a BC-348 receiver into a pencil sharpener.

First, gut the chassis; these parts are totally useless, and would only add weight to the sharpener. All parts which protrude through the front panel should, however, be left intact, so that the outward appearance of the receiver is maintained. The rear power connector may be retained if the mating plug is available, otherwise it will only be necessary to run an AC line cord directly to the newly installed sharpening mechanism.

The sharpener (PS-1) is installed on the left side of the chassis in such a position that the access hole will line up with a new hole drilled through the front panel just below and slightly to the left of the crystal filter knob. The panel hole should be made with a 5/16 drill which allows entry of a standard pencil. The sharpener mechanism may be adjusted as necessary to align with the panel hole through the use of shims on the mounting screws. Connect the 110VAC line cord and the job is done.

Now, insert the chassis into the cabinet, plug the AC cord into a convenient outlet and you're ready for your final check. Just insert your favorite yellow Eberhard Faber #1 into the panel hole, listen for the "whine" and get the point! -- 73 --



BC-348 COMMUNICATIONS RECEIVER

Electronics Museum

of The Perham Foundation
a non-profit educational foundation and
manager of the Electronics Museum

Mailing Address:
101 First Street, Suite 394
Los Altos, CA 94022
(408) 734-4453

The Perham Foundation Electronics Museum presents ONE HUNDRED YEARS OF RADIO: 1895-1995

By Mike Adams

AWA Conference, September, 1995

1895: Guglielmo Marconi and Nikola Tesla send and receive radio waves across a room. They base their experiments on the previous work of Hertz, Maxwell and others.

1897: Marconi starts a wireless company in England. His major goal is to aid the shipping industry and promote safety at sea. He uses a spark transmitter of his invention and Branley's Coherer is used as a receiver.

1897: Professor H.T. Simon superimposes telephone currents on a DC arc to create a line-of-sight voice transmitter. Ernst Ruhmer equips several naval vessels with his version of this light telephone device.

1898: Alexander Graham Bell demonstrates the Photophone, a modulated light transmitter. Its receiver consists of selenium cells, batteries and telephone receiver.

1899: Marconi comes to the United States to conduct experiments in ship-to-shore communication using yachts entered in the Americas Cup races. He starts the Marconi Wireless Telegraph Company of America.

1900: Reginald Fessenden transmits the first wireless voice message using a spark

transmitter modulated by a telephone carbon microphone.

1901: Marconi transmits the letter "S" from Poldhu, England to Newfoundland, Canada. A storm had blown down his antennas at Wellfleet, Cape Cod, USA, the original receiving site.



FESSENDEN

1902: Fessenden invents the Liquid Barretter, a detector that can "hear" audio. De Forest also "discovers" it and later, in an expensive court battle, Fessenden prevails.

1902: Nathan Stubblefield demonstrates a wireless telephone using ground conduction. Long rods driven into the earth are used at both the sending and receiving ends instead of wires.

1902: Marconi invents his Magnetic Detector. It will replace the coherer as a detector by 1904.

1903: Valdemar Poulsen and William Duddell patent their system of DC arc telephony. Variations of their system will be used for most wireless telephone systems until 1916.

1904: John Ambrose Fleming uses the "Edison Effect" to create a two-element vacuum tube. Fleming's contribution is the addition of the "plate" to a light bulb.

1906: Greenleaf Pickard and H.C. Dunwoody develop galena "crystal" detector. Galena is an element that "rectifies" or converts radio frequencies into audio frequencies.

1906: Fessenden uses a specially constructed GE/Alexanderson Alternator to broadcast a Christmas Eve concert to ships at sea. This is the First Broadcast.



DE FOREST

1906: Lee de Forest begins to develop his Audion, the three element vacuum tube. Its initial use will be that of a detector of wireless signals.

1906: American Marconi now operates four land stations, four shipboard installations and employs twenty-five people. David Sarnoff is hired as an office boy.

1907: De Forest equips the Navy Fleet with his version of an arc radiotelephone transmitter and sends phonograph music from the U.S.S. Ohio to shore stations when in port.

1908: Stubblefield patents a second wireless telephone, this one an induction device. It is really a large "air-core transformer," using giant coils of wire at the "transmitter" and "receiver."

1908: A wireless/electrical hobby magazine, *Modern Electrics*, is introduced by Hugo Gernsback.

1909: Public confidence in wireless is high after operator Jack Binns uses it to save 1600 lives from the sinking SS Republic. Government regulation is not far away.

1909: Cyril Elwell obtains the American rights to the Poulsen arc system and starts the Poulsen Wireless Telephone and Telegraph Company which later becomes Federal Telegraph. He sets up shop in a garage provided by his mechanic, Douglas Perham.



DE FOREST SHOWS A GROUP OF AUDIONS TO DOUG PERHAM

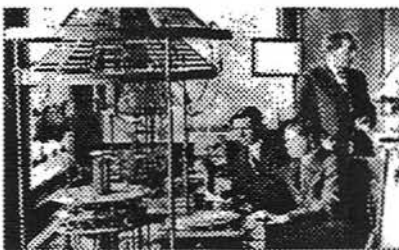
1910: In one of the first references to broadcasting for an audience, Charles Herrold in San Jose is quoted in the January *Electro-Importing* catalogue: "We have been giving wireless phonograph concerts to amateur men in Santa Clara County."

1910: The first attempt at regulation, "An Act of 1910," requires ships to have a wireless set.

1910: De Forest in New York City uses his arc transmitter to send the first of several one-time publicized broadcasts of opera singers to groups of reporters.

1911: The book, *Tom Swift and his Wireless Message* is published. It is part of a series of 40 science fantasy books for boys from the Stratemeyer Syndicate.

1912: The Wireless Ship Act of 1912 requires 24 hour monitoring of wireless by ships. This law is in response to the Titanic disaster and the fact that nearby ships did not hear their "CQD."



HERROLD STATION IN 1912

1912: Herrold begins using an arc transmitter for regularly scheduled broadcasting. He sends out pre-announced programs of music and information to a growing audience until 1917.

1912: American Marconi now has fifty-five land and four-hundred forty marine stations.

1912: Newspaper stories begin to appear about the coming of the radiotelephone. Most inventors are looking for a wireless replacement for the wired Bell telephone. All use some modification of Poulsen's arc.

1912: De Forest, working in Palo Alto, discovers amplifying properties of his Audion. He'll eventually sell these rights to the telephone company to be used to amplify transcontinental telephone calls.

1913: Edwin Armstrong discovers the regeneration (feedback) principle for receiving. Weak signals can be made considerably stronger by feeding a portion of the output back into the input.

1913: There are now 2000 licensed amateur radio operators.

1914: Hiram Percy Maxim founds American Radio Relay League, ARRL.

1915: De Forest begins to discover the oscillating properties of his Audion. He begins to build a new transmitter based on the tube, which eventually replaces the arc by the end of 1916.

1915: Herrold broadcasts daily from his San Jose station to receiving stations at the Panama Pacific International Exhibition (world's fair) in San Francisco, an important early public "radio audience."

1916: De Forest broadcasts the Wilson-Hughes election returns from New York using his "Oscillon" vacuum tube transmitter. He establishes a station at High Bridge.

1916: Jensen & Pridham invent the horn speaker in Northern California. Eventually, their work will become the product of the Magnavox Company of Oakland.

1917: All amateur radio operators are silenced with America's entry into WWI. Even receiving is prohibited between April, 1917 and April, 1919.

1917: Because of war, all inventors of radio technology are forced by the government to "pool" their patents so that the national defense can be served with the most modern communication.

1918: Westinghouse engineer Frank Conrad has been conducting vacuum tube transmitter experiments for the Signal Corp during the war and has built up a small audience with his Saturday music broadcasts for Pittsburgh amateurs.

1918: Armstrong invents the Superheterodyne circuit for receiving. By 1930, all radio receivers will use this principle of operation. It is still used today.

1919: The wartime "patent pool" has so advanced the technologies of radio that a government-sanctioned electronics monopoly is formed. The Radio Corporation of America, RCA, will now control the use of all patents. GE, American Marconi, AT&T and others sign the new agreement.

1920: David Sarnoff describes his "Radio Music Box" in a memo to his RCA bosses. Originally, he claims to have written it in 1916, but recent research disputes this claim. Only a 1920 version can be verified.

1920: GE and Westinghouse manufacture the UV201, to be sold under the RCA Radiotron name.

1920: Conrad's KDKA becomes the first licensed radio broadcaster with the November, 1920 broadcast of the Harding-Cox election returns.



FRANK CONRAD OF KDKA

1921: Westinghouse is the final major company to sign the RCA agreement.

1921: Westinghouse & RCA sell their RA/DA receiver to consumers. Originally, these sets had been designed for wartime use.

1921: Most radios sold are either the simple crystal detector with headphones or the regenerative type, some even with amplifiers and horn speakers.

1921: Two "Radio Boys" series of juvenile books are launched.

1921: The British Broadcasting Company, BBC, is founded.

1922: The vacuum tubes WD11 and UV201A are introduced.

1922: Two hundred broadcasting stations now on the air, all share 360 & 400 meters, most are only on for a few hours a week.

1922: Atwater Kent introduces its first series of "Breadboard" receivers.

1923: The AT&T station, WEAf in New York, accepts the first legal "radio ad."

1923: Amateurs are assigned groups of short wave bands below 200 meters.



"RADIO BOYS" IN THE 1920S

1923: The GE vacuum tube UV199 is introduced.

1924: The first coast-to-coast radio broadcast using telephone lines takes place.

1925: Most radios sold are battery-operated 3-dial Tuned Radio Frequency, TRF, design.

1925: E.H. Scott builds a radio receiver that boasts the longest distance reception yet.

1925: Now, one out of every six homes has a radio.

1925: Magnetic cone speakers are introduced.

1926: The National Broadcasting Company, NBC opens the first radio networks. They are called the Red and Blue.

1927: Westinghouse introduces the UX280 full-wave rectifier

1927: The Columbia Broadcasting System, CBS begins its network.

1927: Electric (AC) radios available, some even look like furniture! Storage battery-powered radios are about to become history.

1927: The Radio Act of 1927 creates the Federal Radio Commission, FRC. Stations are re-assigned to new frequencies and times of operation, and broadcasters are expected to act in the "Public Interest, Convenience and Necessity."

1927: The first auto radios are introduced.

1928: Scott Radio gets competition from other short wave, multi-band, long distance receiver manufacturers like McMurdo Silver, Midwest, Hollister and Lincoln.

1929: "Amos & Andy" is America's most listened to radio program.

1930: The Golden Age of Radio Programming begins, lasts through the 1940's. It features big stars, big bands and big sponsors.

1930: GE sends a music program "around the world" using short waves.

1930: Philco introduces the first "Cathedral" radio, taking the chassis of its larger console sets and putting it into a smaller cabinet, reasonably priced for Depression-era buyers.

1933: Armstrong patents his invention, FM, Frequency Modulation. Broadcasters are impressed at its quality advantages over AM, but refuse to convert for economic reasons.

1933: Radio City, the NBC broadcast headquarters, is dedicated in New York.

1933: FDR begins modern presidential radio communication with his "fireside chats."

1934: The Communications Act of 1934 replaces the FRC with the Federal Communications Commission, FCC. The new act regulates so-called "common carrier" services like telephone along with radio.

1934: The Mutual Broadcasting System, MBS, is formed.

1934: A Court finally awards the rights to the regenerative or feedback circuit principle to de Forest over Armstrong.

1934: Radio Tubes with octal bases are introduced.

1934: A congressional proposal to reserve 25% of the radio channels for education is defeated.

1934: WLW in Cincinnati begins broadcasting with 500,000 watts. The experiment will last until the end of the

1930's. The highest permissible power under the radio act remains 50,000 watts.

1936: Louis Bloch sets up the first "carrier current" college radio station at Brown University.

1936: There are now 40,000 licensed amateur operators in the United States.

1936: Proctor & Gamble is radio's top advertiser.

1937: The Scott Philharmonic, an early high fidelity receiver, is introduced.



ORSON WELLES

1938: Orson Welles's "War of the World's" radio drama causes nationwide panic.

1938: The War in Europe marks the rise of the importance of news on radio. The first world news roundup broadcast begins. News on radio has arrived and matured.

1940: WWII: Radio is the unifying voice of the American war effort.



NEWSMAN EDWARD R. MURROW

1941: Miniature tubes are introduced.

1941: FM is assigned to 42-50MHz.

1941: Amateur stations are again closed because of war.

1942: Government freezes manufacture of radio receivers for the home.

1943: A Court decides in favor of Tesla over Marconi as the inventor of wireless in 1895.

1945: The NBC Blue network becomes American Broadcasting Company, ABC.

1945: German "Magnetophon" magnetic tape recorders are discovered by Jack Mullen. In a few years radio broadcasting is forever changed by this new technology.

1948: The FCC moves FM from 42-50MHz (once TV Ch 1) to 88-108MHz, gives Ch 1 to commercial services like taxis.

1948: The FCC allocates 88.1-91.9MHz for FM educational broadcasters.

1948: Ampex introduces a magnetic tape recorder for broadcasters.

1948: RCA's 45 and Columbia's 33 1/3 rpm records are introduced to consumers. These competing formats will become the Betamax and VHS of music playback software.

1948: The transistor is invented at Bell Laboratories.

1949: Hugo Gernsbach predicts in a *Radio News* editorial that FM will replace AM in a few years.

1950: With popularity of the new medium television, both radio listener ship and advertiser participation begin to suffer.

1950: The Antique Wireless Association, AWA, is formed.

1950: The Magazine *Red Channels* begins the communist witch-hunt/blacklisting era in the broadcasting industry.



THE PUBLIC BUYS TELEVISIONS

1954: Major Armstrong commits suicide.

1954: Regency introduces first transistor portable, the TR-1.

1955: Now 96% of American homes have radio.

1956: Rock & Roll music-formatted radio begins to revitalize AM. The post-war baby boom children are now teenagers demanding their own music and advertisers see the potential profit in this huge new audience.

1958: 60 second radio commercials, called "spots," finally replace "entire program" sponsorship and therefore control of programming by advertisers and their agencies.

1959: Some big city radio disc jockey's are revealed to be taking bribes from record companies to play records, called "Payola." Laws are passed, DJ's are convicted of tax evasion for failing to report extra income.

1960: Radio Drama and Big Network Radio are lost forever to television. "Gunsmoke" is the final radio drama aired, the last of radio's "Golden Age."

1961: Stereo multiplex is standardized for FM broadcasting.

1963: A British group called the Beatles revitalize and "save" AM again.

1967: KMPX in San Francisco is the first "FM underground" radio station, specializing in new music, protest music, music AM stations refuse to air.

1970: National Public Radio, NPR is formed as a program service for educational stations.

1978: The FCC authorizes AM stereo but fails to set a technical standard, expecting the marketplace to decide. It doesn't.

1978: Now the FM audience is for the first time larger than that of AM. Again many predict AM's imminent demise.

1979: The AM broadcast band is extended to 1705kHz. It is hoped that some of the interference problems will be solved by moving some stations to the new channels. It will take fifteen years to move some stations to the new frequencies.

1981: The Reagan Administration begins to de-regulate radio. Stations are no longer required to devote specified amounts of time to news and public service.

1983: Radio begins slow transition from analog to digital. Computers begin to take transmitter readings, create program logs and music schedules.

1990: By now, most radio stations have changed ownership, most have great debt. FCC regulations are loosened to allow group owners to own more stations, even within the same market.

1992: New radio delivery services like Cable Radio (DMX) and Direct Broadcast Satellite (DBS) are introduced to challenge the traditional over-the-air services of AM and FM.

1994: Digital is everywhere in radio audio chain. Analogue magnetic tape devices are about to become obsolete.

1995: Talk radio is credited for "saving" AM radio again.

1995: You attend the AWA Conference. Radio is 100 years old. Happy Birthday.

We hope this information has been useful. We also would like you to know about the Perham Foundation Electronics Museum. We are a non-profit organization, dedicated to the collection, preservation and exhibition of the history of electronics, specializing in early West Coast and Silicon Valley. In our collections, we have early Marconi wireless Federal Telegraph arc transmitters, the papers and audions of Lee de Forest, the early broadcast technology of Charles Herrold, the first piece of test equipment from Hewlett-Packard, over 20,000 pieces of radio and television history, ham equipment, tubes and more. Our extensive library features rare books, periodicals and other documents.

A bit of background on the Perham Foundation: In 1910, Douglas Perham owned several small buildings in Palo Alto, structures that he sold to Cyril Elwell, a Stanford Graduate who founded the Federal Telegraph Company. In 1912, Lee de Forest worked at Federal and perfected his audion into a working amplifier and oscillator. Perham worked as a technician for these important men, but he also led another life as a collector of wireless and electrical devices. In the 1940's Doug met wife Connie, who had an Indian museum in South San Jose where Doug set up the Bay Area's first Electronics Museum. Massive floods throughout the 1950's caused him to seek a better location for his collection.

In the 1960's a group of electronics executives worked with the president of Foothill College to build a museum at there to house Doug's collection and a new acquisition, the personal papers of inventor Lee de Forest. Built using money raised from the local electronics industry and matched with Federal dollars, the Foothill Electronics Museum opened in 1973. Within a decade, a new Foothill administration, hostile to history and with an eye toward the space that the museum occupied, began to make plans to convert our building to classroom space. In 1988 we were taken to court and evicted. The Perham Foundation Board, represented by wireless historian and attorney Bart Lee, obtained a restraining order against the College. Eventually, and after a protracted trial, we were awarded \$750,000 with the proviso that we would take our collections and vacate our Museum. Our artifacts are now in storage, awaiting a new home.

Our architect's drawing of the new museum is shown on the reverse of this page. You can join the Perham Foundation and help the cause of electronics preservation:

- ☐ \$25.00 ANNUAL - our basic membership level. We thank you for your support.
- ☐ \$50.00 SPONSOR - at this level you'll get a Charles Herrold T-Shirt (s,m,l,xl)
- ☐ \$100.00 PATRON - your choice of the *Radio Collector* or Charles Herrold Story video, or the book, *Distant Vision*, the story of television inventor Philo T. Farnsworth.
- ☐ \$500.00 LIFE MEMBERSHIP - T-shirt, both videos, the book, and our thanks.
- ☐ \$ _____ Surprise us and make our day! We may name an exhibit after you!

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The Perham Foundation
101 First St., Suite 394
Los Altos CA 94022
(408) 734-4453

Thank You.

Architect's drawing of our new structure to be constructed at the San Jose Historical Museum. Our proposed three-story museum, while a single structure, features the facades of two early San Jose buildings: the taller of the two is the Odd Fellows Hall (IOOF) and the shorter one on the right is post-WW1 Charles Herrold College of Wireless and Engineering.



IN MEMORIAM: HOWARD HEIN

by John Eckland
969 Addison Ave.
Palo Alto, CA 94301

Howard Hein, one of the Bay Area's earliest radio collectors, passed away recently at age 87 at his residence at 1320 Belmont Avenue, San Carlos, California. Howard was the son of a prominent dentist, George Hein. Howard, as a boy, was hit by a San Francisco streetcar, thus rendering him partially disabled for the rest of his life. He was encouraged to live at home with his parents and given an allowance to enable him to pursue his hobby of collecting various artifacts from the past that intrigued him. Topping the list are early wireless and radios up through 1930, movie posters up through the 60s, patent models and laboratory instruments. Also microphones, tubes and all manner of radio periphery.

As a young man, Howard was trained as an operatic tenor by one of Enrico Caruso's teachers. He would break out and sing "Mephisto" at the local grocery store to entertain shoppers. Some female shoppers would then come up and kiss "The Great Hein," also known as "The Bellowing Boy Baritone of Belmont Avenue."

After Howard's father passed away, Howard's collecting got on a roll. His source of material consisted of the many landfill sites from South San Francisco on down the peninsula to as far as Mountain View. Howard befriended the dump operators or dumpmasters and employed and deployed high school kids at his favorite sites for the purpose of gathering designated material. Most dumpsites were privately run and scavenging was permissible. Radios made prior to 1930 were scooped up by Howard's young operatives and at the end of

the day Howard would drive by and pay off the dumpmasters, picking up his material and gatherers, heading for home.

A mishap occurred one day when one of Howard's gatherers asked for a price on a "three-dialer," was quoted an outrageous price by the dumpmaster, and in a heated exchange, referred to the dumpmaster as "chickenshit." This disrespect resulting in Howard being banished from one of his favorite dumps for well over a year! Now and then Howard would reminisce about the variety of ancient material he passed up on, but for lack of space. One day he found a great stash of literature from the civil war, eagerly gathering and boxing up same; then he smelled smoke! The dumpmaster lit up the dump as was customary, right behind him so it was time to make haste.

Howard filled up a four car garage, attic, crawlspace, two bedrooms, storage sheds and an old canvas tent with, at its peak, well over five hundred sets. His favorite set was a C.R. Leutz Admiralty, owned by a former president of Vitaphone Talking Pictures. Howard had such a great quantity of AK breadboards, that they were stacked in the garage like cordwood! During the 60s, Howard would put on a few exhibitions of the highlights of his collection at local banks and historical associations. He was written up regularly in the local newspapers from the early 60s on through the late 70s. When visiting Howard, a whole afternoon would have to be set aside for "The Great Hein" had a propensity for gab. He also repeatedly changed subject material as he talked. To say that Howard was an eccentric would certainly have been an understatement!

R.I.P.

Jeffrey Rae owns
some fantastic antique radios.
And an airline that tunes in Hong Kong
for you with two nonstops a day.

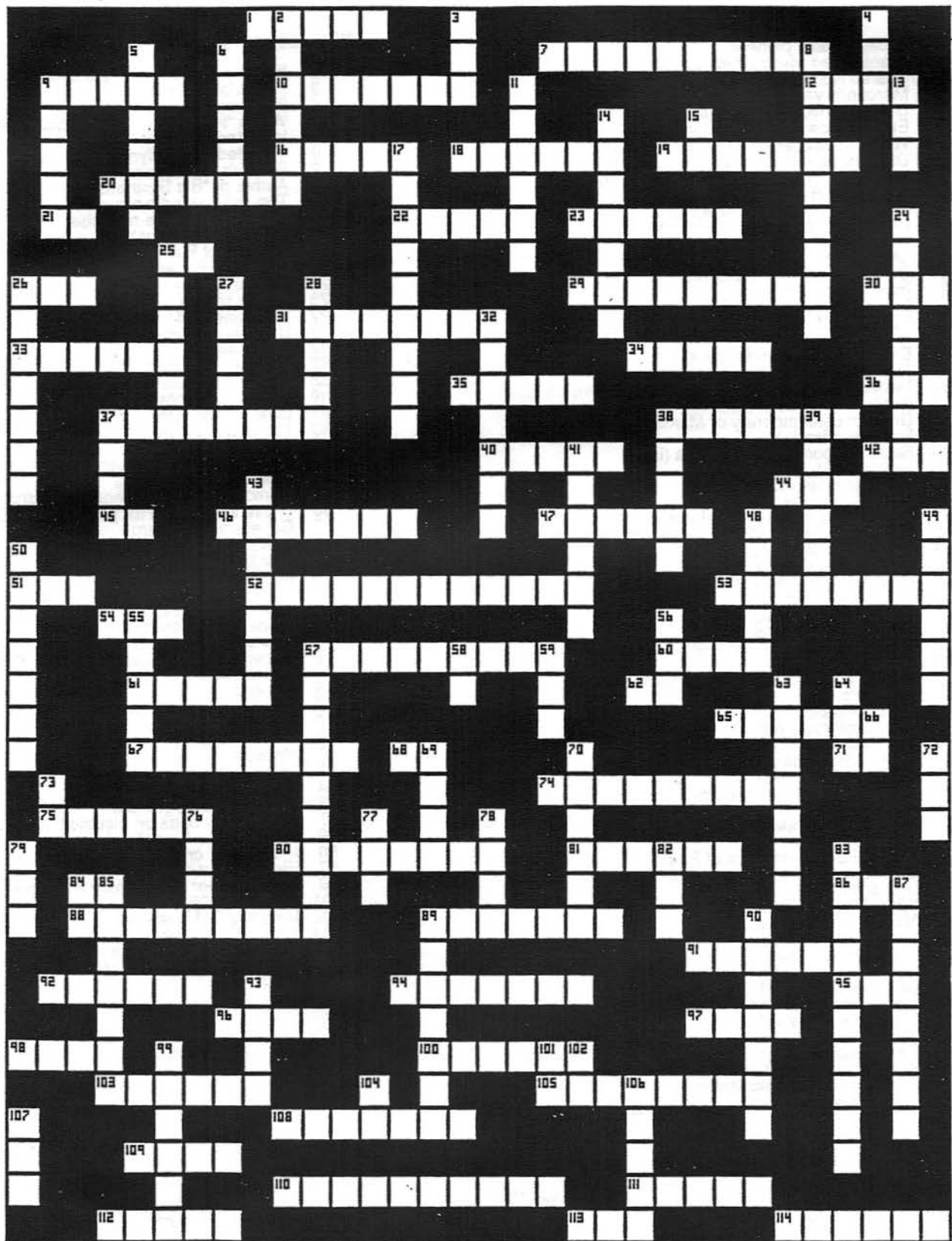


With two nonstops a day from San Francisco to Hong Kong, one of them completely nonsmoking, it's clear one airline is attuned to your needs. The airline that United Computer Programmer and Employee-Owner Jeffrey Rae is pleased to call his. But then, one shouldn't be surprised Jeffrey is giving United's customers what they want. He's a very good listener. Call your Travel Professional, or call United at 1-800-331-2929. We don't just work here. Come fly our friendly skies.

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Tu-Su Flt. #035 Ls. 11:30 a.m. Ar. 1:10 p.m. +1
Mo Flt. #035 Ls. 1:35 p.m. Ar. 6:35 p.m. +1

UNITED AIRLINES

Radio Anniversary Puzzle



Marsha Simkin
1995

RADIO ANNIVERSARY PUZZLE

ACROSS

NUMBER	CLUE
1	Russian radio pioneer
7	Transmitted electromagnetic waves through pipes
9	Shared Nobel Prize with Marconi
10	Marconi's yacht
12	Defunct antique radio club(init)
16	Electrical genius and coil inventor
18	Wrote "Practical Wireless Telegraphy"
19	Discovered current electricity created magnetic field
20	Italian developer of theory of animal electricity
21	Initials of 46 Across
22	Inventor of magnetic telegraph
23	Held patent for aerial telegraphy
25	Initials of 67 Across
26	British communications network
29	Canadian-born radio pioneer
30	Interference (Q-Signal)
31	Invented "audion"
33	Publisher of ARC
34	gap
35	British physicist and thinker
36	Title of 46 Across(abbr)
37	Developed theory of _____ -Heaviside layer
38	Harnessed electric arc to wireless
40	German contemporary of Marconi
42	Radio publication
44	Radio Corporation of America (init)
45	Initials of 91 Across
46	Founder of 44 Across
47	Motorola founder
51	Not the Blue but the _____ Network
52	Translated Faraday's work into math expressions
53	Famous for fancy tubes
54	Unit of electrical measurement
57	Chief engineer for United Wireless
60	WD11 is one kind
61	Italian scientist and teacher
62	Initials of 75 Across
65	Induction telegraph pioneer
67	RCA TV pioneer
68	Renown upstate NY collector(init)
71	Trucker's radio
74	Editor of radio magazines
75	Pittsburgh radio man
80	RCA engineer
81	Italian telephone pioneer
84	Initials of 88 Across
86	Unit of electrical measurment
88	Hertz's professor
89	Wrote "The Wireless Man"
91	Light bulb inventor
92	Wrote "Boy's First Book of Radio"
94	Developed first electrical motor
95	Distress signal
96	What Tesla is known for
97	Nickname of 57 Down
98	Associate of Morse
100	Telegraph system
103	Had early NJ TV lab
105	GE research scientist
108	Utilized Edison's effect in a rectifier
109	Marconi's assistant
110	German radio company
111	Radio manufacturer
112	Known for Atlantic Cable
113	Sear's Chicago radio station
114	Title of William Thomson, Lord _____

DOWN

NUMBER	CLUE
2	Italian professor who studied coherence
3	Initials of 17 Down
4	Radio network
5	Wrote "Radio's 100 Men of Science"
6	Invented the battery
8	Invented neotrodyne
9	Scottish TV pioneer
11	Author of "Big Business & Radio"
13	Top antique radio organization(init)
14	Invented cathode-ray tube
15	Took over RCA(init)
17	Inventor of FM
24	Old name for radio
25	Chief engineer for Marconi Co
26	Power source
27	Experimented with wireless tuners
28	Discovered self induction
32	Lord Kelvin
37	Atwater
38	Wrote "From Immigrant to Inventor"
39	British radio physicist
41	Invented coherer
43	Italian radio inventor
48	Radio manufacturer
49	Slovakian radio pioneer
50	Cincinnati radio mogul
55	Demonstrated existence of electric waves
56	I have a message for you ((Q-Signal)
57	GE electrical wizard
58	Alternating current(abbr)
59	Title of 49 Down(abbr)
63	American TV pioneer
64	Government communication agency
66	Initials of 41 Down
69	Pioneer radio station
70	Wrote radio engineering books
72	Reception acknowledgement (Q-Signal)
73	Direct current(abbrev)
76	Dot and
77	Telegraph instrument
78	Telephone inventor
79	Come, Quick, Danger"(code)
82	Network
83	TV pioneer
84	Initials of 55 Down
85	California radio pioneer
87	Wrote early book on electric telegraph
89	Wrote Radio Boys' books
90	Introduced crystal detectors
93	Electrical unit
99	Early pioneer in electricity & magnetism
101	Initials of 105 Across
102	Initials of FM inventor
104	Armstrong's invention(init)
106	Founded German math theory of electricity
107	Very High Frequency (abbr)



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The Days When America Listened in 'Live'

In 1934, millions of Americans stayed glued to their radios as Admiral Byrd and a band of hardy explorers struggled to survive in a frozen wasteland 9,000 miles away.

MANY of our senior readers will remember those fascinating broadcasts. Barely audible above the static and crackle of the radio set came a deep, distant voice:

"Good evening. I am speaking to you from 'Little America', Admiral Richard E. Byrd's remote Antarctica base camp at the South Pole. I hope you can hear me."

The year was 1934, and radio engineering was still in its infancy. "Live" voice communications from a frozen world 9,000 miles away were almost unbelievable. To most radio listeners

By Ed Knapp
Three Rivers, Michigan

the 30-minute broadcasts, describing the ongoing adventures of Admiral Byrd and his hardy band.

A typical program began with Murphy announcing: *"The 6 months of darkness have finally ended here. Welcome smiles are clearly visible on the weather-strained faces of the 56-man crew anchoring this installation."*

Through the magic of radio, listeners were transported from their cozy living rooms to the coldest, loneliest and most desolate spot on earth. Temperatures averaging 65° below zero made survival a real challenge for the explorers.

Grape Nuts, the sponsor of the program, gave listeners a special opportunity to follow the action. If you sent in two cereal box tops, you would receive a full-color, foldout map of Antarctica. That helped you trace the activities of Byrd's adventurers

as you followed along with Murphy's dramatic descriptions.

Names such as "Discovery Outlet", the "Ross Barrier" and the "Bay of Whales" became familiar to a nation of radio devotees. Particularly moving were programs in which the men at the base had an opportunity to talk with their loved ones back in the States while radio audiences listened in.

Daring Discoveries

Although Murphy tried to air some lighthearted stories, his programs were continually filled with tales of brutal blizzards and perilous rescues.

Common, too, were stories of discovery: *"Today we are speaking to you from our 'Condor' aircraft as it circles over uncharted mountain rang-*

es and snow-blanketed plateaus. Last week from the air, our pilot caught sight of a magnificent iceberg, measuring some 23 miles in length."

Radio audiences also heard reports of strange new wildlife species, odd seasonal changes, penguin gatherings and new pups born to the working colony of 153 sled dogs.

No matter what news Murphy reported from the pole, listeners always felt a twinge of sympathy for the explorers at "Little America". Even though they had never seen the men, those at home could almost feel the hours of boredom, weariness, stark confinement and homesickness the explorers endured.

Through Murphy's descriptive voice, listeners could almost feel the relentless cold and dark. *"Two days ago, with reluctance, we witnessed the final departure of the sun over the icy landscape, not to be seen again over the next 4 months."*

Heroic Admiral Byrd, one of the world's last explorers, was actually leading his second expedition to the South Pole at the time of the broadcasts. He had established Little America during his first expedition, between 1928 and 1930. He would eventually make five trips to Antarctica.

Spent Winter Alone

Byrd thrived on his quest for the unknown so much that he manned an advance base all alone for most of one winter during this 1934 expedition.

During and after this adventure, Byrd and his brave explorers produced volumes of new scientific data about our world. They studied meteors, cosmic rays, weather, geography and the earth's magnetism.

And through the magic of an infant gadget called radio, many of those discoveries were instantly shared with millions of listeners, huddled closely around their radio sets in the living rooms of America.

It was as though those listeners were there with them, sharing the adventure of it all, in those pre-TV days when people still had to use some imagination.

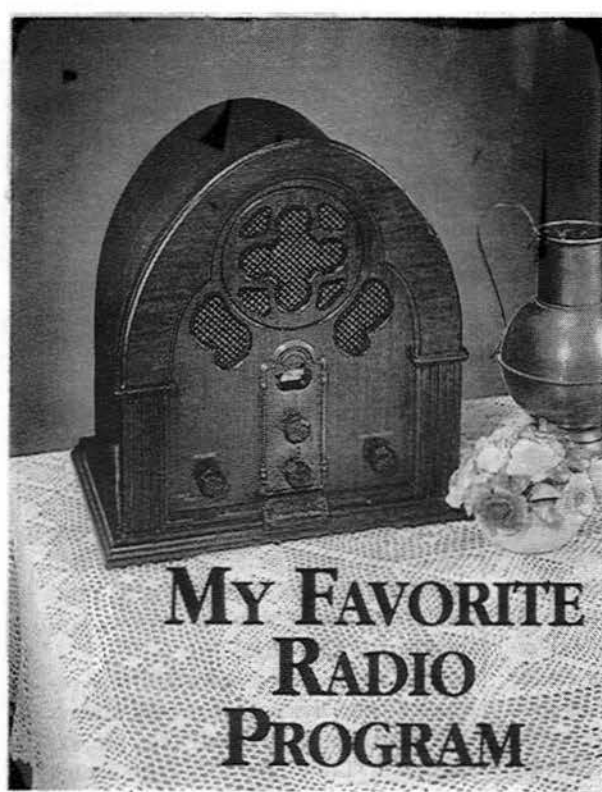


of the day, it all seemed like the stuff of a science fiction novel!

But fiction it wasn't; history it was. The weekly series of broadcasts, aired over a special shortwave frequency, was a communications marvel. Each program riveted the attention of a fascinated America.

Tuning in on Saturday evenings, listeners soon learned more than they ever knew about the trackless wasteland of frozen Antarctica. They learned of rugged mountain ranges, savage snow squalls, vast, unexplored interiors and paralyzing cold. Without the benefits of television, it forced each listener to envision his or her own version of what these explorers were seeing firsthand.

Announcer Charlie Murphy hosted



MY FAVORITE RADIO PROGRAM

***We asked readers
to tell us about
the golden age of
radio and that one show
they just couldn't miss.
Did they ever!***

"WHEN I WAS 10 years old, my favorite scary program was *Lights Out*. It was so scary that I only listened with my parents.

"One evening, I found myself home alone—and it was time for my program! I *couldn't* miss that show, so I sat on a chair opposite our Philco radio and slowly reached for the knob.

"As I turned up the volume, a booming voice commanded, 'If your lights are on, turn them off!' I ran to the light switch, clicked off the lights and hid behind a chair until my parents came home."

—Dorothy Sheets
Walnut Creek, California

"MY FAVORITE program was *Little Orphan Annie*, and I often listened on my grandparents' console radio. It was tall and boxy, and the front was covered with a beautiful floral-patterned cloth.

"One night, Grandma set me down in front of the radio to listen to my favorite show while she made dinner. As I sat there, I got to thinking how great it would be if I could see *Little Orphan Annie* and Sandy.

"I was sure they were inside that

radio, so I took Grandma's scissors out of her sewing basket and cut that floral cloth off the front of the radio. I slowly peeled back the material, and was utterly shocked to find nothing but a bunch of tubes in a tangle. I couldn't understand it! Just then, Grandma returned to the room.

"Well, she was more than a little upset, and said Grandpa would be very angry when he got home from work. Fortunately, Grandpa saw the humor in the situation. He laughed, kissed me and said, 'You'll always be my little sweetheart.' I was so relieved, I gave him a big hug."

—Edna Misino
York, Pennsylvania

"NEWLY ENGAGED, I was horrified when my sparkling diamond ring slid off my hand and down the drain in the bathroom sink. 'Dad! Dad!' I screamed in panic, 'My ring went down the drain!'

"There was no answer. I stomped down the stairs to find Dad listening to the radio. 'Didn't you hear me?' I asked. 'Yes, I heard you,' he replied, 'but that ring will still be there when *Amos 'n' Andy* is over.'

"Sure enough, when *Amos 'n' Andy* was over, he removed the 'gooseneck' under the sink and retrieved my ring."

—Elsie Keys, Point Marion, Penn.

"DURING THE '20s and '30s, radio was our link to the outside world.

"I can remember my family enthusiastically discussing Admiral Richard E. Byrd's explorations in Antarctica. In 1934, we eagerly awaited Saturday evenings when we'd all sit around the radio and listen to reports from his base camp, 'Little America'.

"I was every bit as excited during those Saturday evening reports as my sons were when they watched Neil Armstrong's walk on the moon 35 years later."

—Maracella Murphey
Oregon, Ohio

(Editor's Note: For more about Byrd's exciting broadcasts, see page 42.)

"IN 1932, I was 8 years old. One night, I was listening to *The Lone Ranger* on our battery-powered radio. With 'Hi ho, Silver, away!' ringing in my ears, my mother called me to get my chores done.

"Not wanting to miss any of the

story, I turned off the radio and warned my sister, 'Do not turn the radio on because I want to listen to the rest of the program when I finish my chores.'

"I was convinced that, when I turned the radio off, the story would stop and I could start it up again just by turning the switch back on!"

—Mrs. Ned Ratcliff, Summit, Mississippi

"I REMEMBER how lucky I felt when I convinced my mother that I needed a jar of Ovaltine. With the 'proof of purchase', I could get a *Little Orphan Annie* decoder pin.

"I listened every day to get the secret message, and then decoded it in order to find out ahead of time what was going to happen. Since my friends did not have decoder badges, I felt very important when I could tell them about the secret messages."

—Barbara Emery
Idabel, Oklahoma

"MY MOTHER'S favorite program was *Young Widder Brown*. It seemed that lady was forever having problems. My mother had a great imagination, so she used to think up ways for Mrs. Brown to avoid such awful situations.

"*The Shadow* was my favorite show. When I heard that creaking door, fear would absolutely climb up my 10-year-old spine. It got even worse when the baritone announcer would slowly say, '*The Shadow knows...*'

"The coal oil lamps would cast shadows on the walls and, if a door really did squeak, I was too terrified to go to bed in a dark room. Guess I had a pretty good imagination, too."

—Relda Tennison, Abilene, Texas

Your Favorite Program? Was there one special program that you just *couldn't* miss during the early days of radio? If so, why not tell us about it? What made your show special? What was it like to imagine the characters and drink in the excitement?

Send your reminiscence to: "Remembering Radio", *Reminisce*, 5927 Memory Lane, Greendale WI 53129.

ABOUT THE RADIO COLLECTOR
A New Publication For The Antique Radio Enthusiast



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What is The Radio Collector? *The Radio Collector* is an independent national bi-monthly (6 issues per year) publication for antique radio collectors and restorers. It is a newsletter-style journal, 8 1/2" x 11" in size, and averages 10 pages in length. R.C. is drilled for convenient storage in any standard 3-ring binder.

Who publishes The Radio Collector? R.C. is published and edited by Marc Ellis, who is also antique radio columnist for Popular Electronics Magazine and Restoration Editor for the Old Timer's Bulletin of the Antique Wireless Association.

What do your readers think of R.C.?

. . . *Just received my first issue of The Radio Collector and am delighted. Your obvious love of the subject, as demonstrated both by your Popular Electronics columns, and now this publication, augers well for the new venture. . .* (C.R.Z., Halifax, N.S., Canada)

. . . *Received the first issue and am very pleased. From your description of what you wish to accomplish, it sounds perfect for my needs. . .* (G.G., Woodbridge, VA)

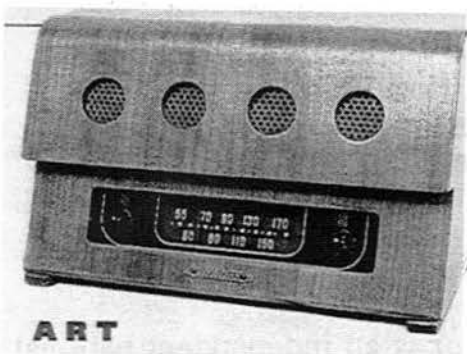
. . . *I was delighted to receive the first issue of your "Radio Collector," look forward to future issues, and wish you great success in this endeavor. . .* (A.M., Dallas, TX)

Who should subscribe to The Radio Collector? During its first few months of publication, it has become clear that *The Radio Collector* is attracting not only new collectors but also more seasoned ones. Both sets of readers appreciate R.C.'s systematic publishing approach. The veterans enjoy sharing their knowledge, and their helpful comments appear regularly on our pages.

How can I become a subscriber? If you picked up this flyer at an R.C. exhibit booth, come on back and see Marc Ellis! Otherwise, subscriptions to *The Radio Collector* should be sent to *P.O. Box 1306, Evanston, IL 60204-1306. Annual rates are \$20.00 (U.S.); \$21.50 (Canada--U.S. funds); \$35.00 (via air to other countries--U.S. funds).*

All subscriptions to R.C. are backed by a no-questions-asked money-back guarantee. If you are not satisfied with the first issue keep it as a gift and notify Marc. Your money will be immediately refunded in full.

Real Old Radios:



ART

Ray and Charles Eames, designers who radically influenced the lifestyle of the "young moderns" of post-war U.S. society, will be the focus of a major retrospective exhibit through Nov. 20 at the quirky Modern i gallery, 500 Red Hill Ave., San Anselmo. Vintage furniture including a revolutionary series of chairs (remember the airport fiber-glass shell seats?), educational toys, a 1946 radio cabinet (shown), pioneering graphics and films will be on display in "Eames Designs 1940-1960: A Show of Appreciation." Information: (415) 456-3960.

— P. Thorne

ANTIQUES *Ralph and Terry Kovel*

Designer Radios Sounding Sweet

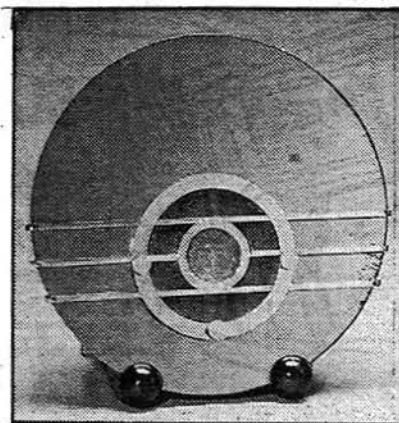
Vintage models are drawing collectors

Radios from the 1930s to 1950s are attracting collectors. The design and the fame of the designer are what determine the price.

The rare 1930s radios were made of plastic or mirrored glass. A Sparton blue mirror glass, chromium-plated metal and wood radio designed by Walter Dorwin Teague, circa 1936, sold for \$2,640 at auction in 1992.

Teague (1883-1960) was one of a group of industrial designers who changed the look of the everyday appliances manufactured at that time.

He was a graphic artist who designed Eastman Kodak cameras and film packages, office machines, the Marmon car, the Scripto pen, Steuben glass, railroad coaches and Texaco gas stations. The best-known designs are probably the plastic Baby Brownie camera and the Sparton radio.



RADIO DAYS: This 1930s Walter Dorwin Teague radio was auctioned for \$2,640

San Francisco Chronicle (Z-1) 7

WEDNESDAY, DECEMBER 21, 1994

Fake Old Radios:

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[] **MADE IN JAPAN: TRANSISTOR RADIOS OF THE 1950s AND 1960s**, by Handy, Erbe, Blackham & Antonier. This wonderful book features dozens of full color photographs of vintage transistor radios, along with accompanying text "tracing the history of the Japanese transistor radio from its American invention to its Japanese mass production and its subsequent stylistic developments." Although there are no prices or model numbers, the outstanding photography of dozens of highly collectible Japanese sets makes this book a must-have for every serious transistor collector. 109 pages, 10 x 9 1/2 softcover. \$16.95

[] **COLLECTING TRANSISTOR NOVELTY RADIOS, 1994 PRICE UPDATE**, by Robert F. Breed and Marty Bunis. This 1994 update contains current prices for each of the radios listed in the original book written by Robert Breed, now out of print. If you collect, buy or sell novelty transistors, don't be left behind with yesterday's prices—send for your copy today. 14 pages, softcover. \$4.95.

[] **THE ZENITH TRANS-OCEANIC: THE ROYALTY OF RADIOS**, by John H. Bryant, AIA and Harold N. Cones, Ph.D. "The never before told story of the Zenith Trans-Oceanic, the world's most romantic and expensive series of portable radios." If you like Trans-Oceanics, you'll love this book—it's a real beauty, complete with dozens of great photos, plus lots of historical and production details on every Trans-Oceanic, including all of the transistorized models. A must for your radio library. 160 pages, 8 1/2 x 11 softcover. \$24.95

[] **THE COLLECTOR'S GUIDE TO ANTIQUE RADIOS, 3RD EDITION**, by Marty & Sue Bunis. This is the latest edition of this popular guide to tube radios. The easy to use format covers the years 1920-1965 and includes over 8,500 models and over 700 all-new full color photos. 280 pages, 8 1/2 x 11 softcover. \$18.95

[] **THE COLLECTOR'S GUIDE TO ANTIQUE RADIOS, 2ND EDITION**, by Marty & Sue Bunis. This edition is now out of print and we have a *very few* remaining copies available. 216 pages, 8 1/2 x 11 softcover. \$17.95

TRANSISTOR NEWSLETTER

[] **TRANSISTOR NETWORK**, published by Marty & Sue Bunis. If you buy, sell or collect transistor radios you should be reading and advertising in the Transistor Network, a monthly transistor newsletter featuring transistor related articles, pictures, and classified ads. Only \$17.00 for a one year subscription (12 issues) US, \$20.00 Canada, \$30 foreign (air) US funds only. Not sure? Send \$1 (refundable toward a subscription) for a sample copy.

POST THIS CALENDAR AND UPDATE AS NEEDED - ALL EVENTS ARE SUBJECT TO CHANGE OR RAIN-OUT - FOR THE BEST & MOST CURRENT INFO, CALL THE HOT LINE!

JANUARY

HAPPY
NEW
YEAR!

FEBRUARY

3RD - REDWOOD CITY
SAT. AMPEX
8AM

MARCH

30TH - BENECIA
SAT. HOME VIDEO
8AM

APRIL

CHRS



1996

MAY

4TH - LOS ALTOS HILLS
SAT. FOOTHILL COLLEGE
8AM

18TH - SAN LUIS OBISPO
SAT. LOCATION T.B.A.
8AM

JUNE

8TH - MARIN CO.
SAT. LOCATION T.B.A.
8AM

JULY

6TH - SAN FRANCISCO
SAT. ST. ANNE'S
8AM

AUGUST

3RD - LOS ALTOS HILLS
SAT. FOOTHILL COLLEGE
8AM

HOT LINE (415) 978-9100 USE IT!

SEPTEMBER

14TH - FAIRFIELD/
RIO VISTA
SAT. WESTERN RAILROAD
8AM MUSEUM
SWAP/PICNIC.

OCTOBER

5TH - REDDING
SAT. NORTHERN CHAPTER
8AM

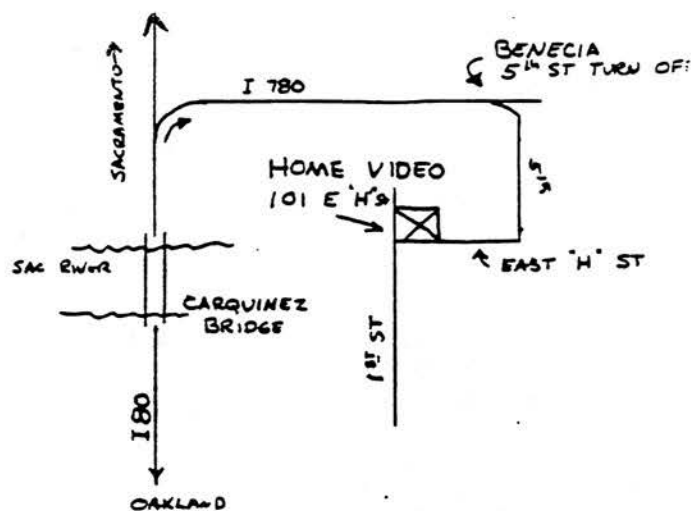
NOVEMBER

2ND - LOS ALTOS HILLS
SAT. FOOTHILL COLLEGE
8AM

DECEMBER

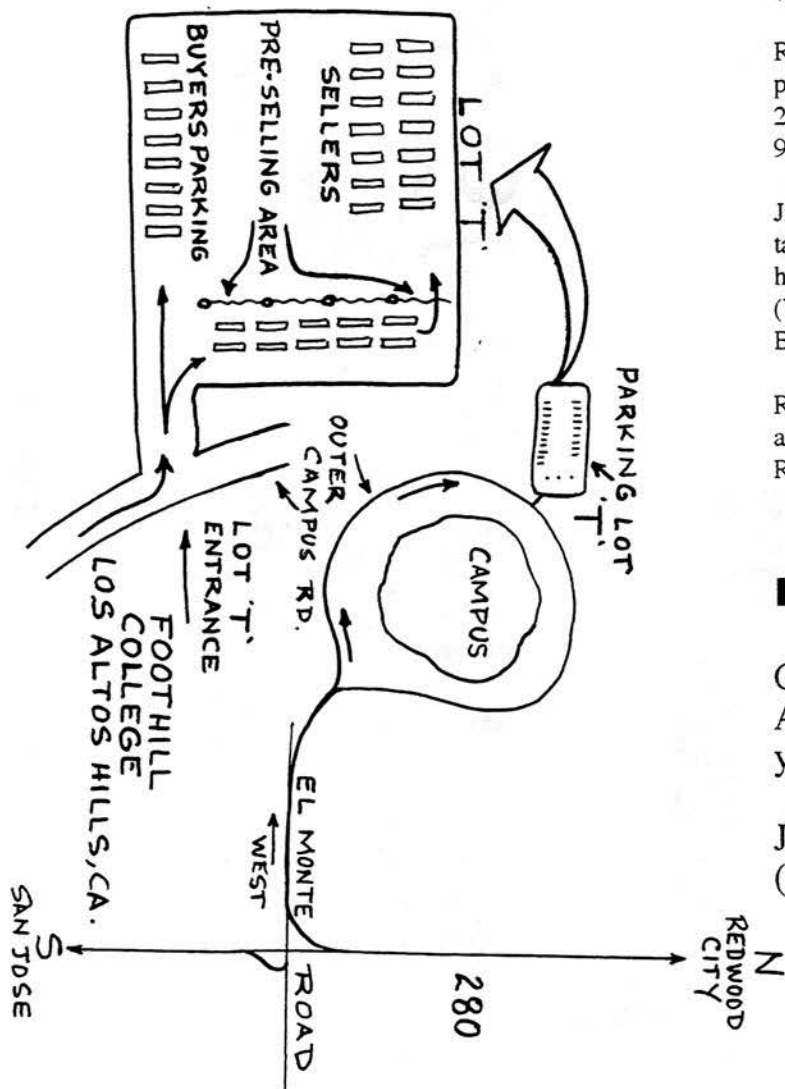
HAPPY
HOLIDAYS!

NEW FOR 1996, THE \$5 SELLERS FEE IS BACK - YOU MUST BE A MEMBER TO SELL!
START TIMES FOR THESE EVENTS WILL BE ENFORCED... HAPPY COLLECTING!
CALIFORNIA HISTORICAL RADIO SOCIETY, P.O. BOX 31659, SAN FRANCISCO, CA 94131



BENICIA SWAPMEET SITE MAP

FOOTHILL COLLEGE SITE MAP



SERVICES FROM MEMBERS: Some members indicated on their renewal forms that they can provide specific trade services to others:

Norm BRAITHWAITE has more than 100 battery and early AC radios from the 1920s for sale cheap (\$20 to \$50). Call him for an appointment to preview at (916) 246 4209, or at (916) 245 0864. (P.O. Box 992443 Redding, CA 96099-2443).

Michael A. CHRIST has a rabid interest in building big horns of various sorts including theater, vintage, and new designs, and he will build to your specifications. ((415) 548 1325) @ 2030 C THIRD Street, Berkeley, CA 94710).

Allan HIBSCH offers wind up phonograph repair service. Call him at (916) 589 0138 (4 La Floret Court, Oroville, CA 95966).

Norman LEAL (WA6VGE) is willing to help on any technical problems by phone or written correspondence. (1485 Naples Way, Livermore, CA 94550).

Robert M. URBAN has a limited supply of replacement parts he can provide to radio collectors. ((415) 948 2815) @ 55 Hawthorne Avenue, Los Altos, CA 94022-3702).

Jim WATSON has more than 20,000 radio programs on tape, including programs from the 30s to the 60s, and historical items as well. Call him at (209) 683 7442 (W) or home and FAX at (209) 683 7260. (Post Office Box 104 - 35533 Hwy 41, Coarsegold, CA 93614).

Roy YOST offers repair of tube-type radios, especially auto-radios. ((415) 369 0890) @ 30 Clinton Street, Redwood City, CA 94062-1514).

IN MEMORIAM:

CORNELL F. BROWN (Bentonville, AR). His sister writes: He enjoyed your club very much.

JIM LOMASNEY WA6NIL/SK (Palo Alto). He will be missed.

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THE
**CALIFORNIA
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CHARLES D. 'DOC' HERROLD AWARD

**FOR OUTSTANDING ACHIEVEMENT
IN THE PRESERVATION AND DOCUMENTATION
OF EARLY RADIO.**

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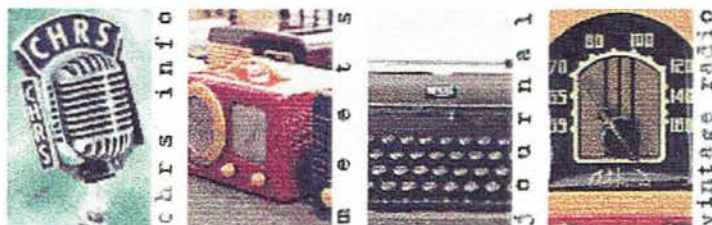
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